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The American Artisan

THE HARDWARE RECORD

Vol. 45---No. 16. CHICAGO, APRIL 18, 1903. $2.00 Per Year.

BOLTS

AND

Carriage Forgings

Write for General Catalogue "C" and Prices.

COLUMBUS BOLT WORKS, Columbus, Ohio.

PURE ASPHALT "SAMPSON BRAND" ROOFING

Never Dries Out or Cracks. Planet Brand Tarred Ready Roofing, Slaters' Felt, Building Papers, Roofing Cements, Paints, Etc. WRITE US FOR PRICES.

J. L. PERKINS & CO., 235 Lake St., CHICAGO

Never Will Leak . . .

American Seal Elastic Oil cement will not get hard—always stays elastic.

Stops leaks in any roof—old or new, and will wear for years. Fix up the roof now and stop the leakage—in money and roof.

Use it on new work for jointing and 'round your skylights—follow it with a coat of American Seal Roof Paint—the best made—and the top of your house is safe for years. *Prices for the asking.*

THE WM. CONNORS PAINT MFG. CO.,
TROY, NEW YORK.

WESTERN AGENTS { J. L. Perkins & Co., 235 Lake St., Chicago.
Dept. A. { Stockhoff Supply Co., 107 North Main St., St. Louis.

"To discontinue your advertisement," says Ex-Postmaster-General John Wanamaker, one of the largest advertisers in the world—and naturally enough, one of the most successful business men,—"is like taking down your sign. If you want to do business, you must let the people know it. I would as soon think of doing business without clerks as without advertising"

TINNERS FIND EMPLOYMENT

By advertising and using THE POWERS AUTOMATIC CHIMNEY TOPS

They make chimneys draw, give tinners employment making stocks, and give the dealers profit

Sold by Hardware Jobbers and Dealers

Made only by

POWERS BROS.
STREATOR, ILL.

This cut free to dealers.

BURTON'S Fuel Economizer

Attached to a stove pipe saves more fuel and radiates more heat than any other stove pipe attachment.

AN EASY SELLER.

Assertions Backed by Guarantee.

The W. J. BURTON CO.
DETROIT, MICH.

ATLAS BOLT & SCREW CO.
CLEVELAND, O.

We make a full line of

Stove Bolts, Stove Rods,
Machine Screws,
Pointed Pins,
Threaded Wires,
Rivets, Special Bolts,
Mica Bolts,
Cold Pressed Nuts.

Crying—to—do—business—without—advertising—is—like—winking—at—a—girl—in—the—dark;—you—know—what—you—are doing—but—nobody—else—does.

Black Diamond Files and Rasps

PERFECT—ALWAYS

Twelve Medals Awarded

At International Expositions

C. & H. BARNETT CO.
Black Diamond File Works, PHILADELPHIA, PA.

Nicholson File Co.

GENERAL OFFICES: PROVIDENCE, R. I., U.S.A.

Manufacturers of

FILES and RASPS

NICHOLSON, KEARNEY & FOOT, ARCADE, AMERICAN, GREAT WESTERN, McCLELLAN, EAGLE, J. B. SMITH, "X. F." GOLD MEDAL.

GENEVA TOOL CO. Hand Agricultural Tools, GENEVA, OHIO.

Our immense sales volume—annually increasing—results from pleasing the contractor with methods which save his time and money—with goods which satisfy—to wit:—AMERICAN Radiators, IDEAL Boilers.

AMERICAN RADIATOR COMPANY

LAKE & DEARBORN STREETS, CHICAGO.

New York. Boston. Philadelphia. Buffalo. St. Louis Minneapolis. Detroit.

The Columbia

OUR NEW PORTABLE BOILER

for Steam and Hot-Water Heating, is a trade winner. If you have not received our price-list write for it and secure the agency for your city.

VANCE BOILER WORKS, 148 Water Street, Geneva, N. Y.

MAYER & COMPANY

WE USE THE BEST STEEL
WE HAVE THE BEST METHODS OF TEMPERING AND PAY THE HIGHEST WAGES
BEST ON EARTH
GOLD MEDAL FILES
NOT IN THE TRUST

"Eagle" Brand Copper Rivets and Burrs

STANDARD FOR QUALITY. (Lake Superior Copper.)

—MANUFACTURED BY—

THE PLUME & ATWOOD MFG. CO.,

29 Murray St., NEW YORK 196 Lake St., CHICAGO, ILL.

SPERRY'S CALDRONS....

Full measure, guaranteed perfect, original patterns, with metal distributed where it is needed. Many Caldrons are made from our castings as patterns. They are inferior to original, as they have light bottoms and heavy sides and hold less.

TWELVE SIZES ALWAYS IN STOCK.

D. R. SPERRY & CO.,

HOLLOW-WARE FOUNDERS,

BATAVIA, ILL.

"TABASCO" WATER HEATERS

All Steel, Self-Feed Shaking Grate

FOR

Small Residences, Green Houses, Flats, Hotels, Baptistries, Bath Houses, any place a supply of hot water is needed.

Send for Catalog.

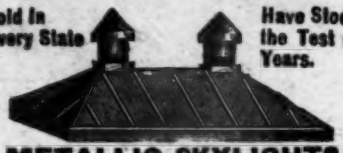
KEWANEE BOILER COMPANY

KEWANEE, ILL.

CHICAGO STORE: 167-169 E. Lake St. CHICAGO.

"THE ILLINOIS"

Sold in Every State



Have Stood the Test of Years.

METALLIC SKYLIGHTS

Made in 10 Styles and 500 sizes.

"THE ILLINOIS" are the best skylights made. We also manufacture Cornices, Finials, etc. Send for handsome illustrated catalogue. Ribbed skylight glass furnished at very lowest prices.

J. H. JONES & SON, Mfrs.,

Lock Box 33. STREATOR, ILL.

M. TRAVILLA,

QUINCY, ILL.,

MANUFACTURER

"Air-Tight" Stoves

ASK FOR PRICES.

Wellsville Polished Steel

"THE VERY BEST."

"ROME"

NICKEL PLATED COPPER WARE

Tea Kettles, Range Kettles, Tea and Coffee Pots, Wash Boilers, Etc.

ROME MANUFACTURING COMPANY, ROME, N. Y.

WRITE US FOR PRICES Address Department A

The Original Moore's AIR-TIGHT Heater

WILL KEEP YOU WARM

Moore's Stoves Always Please

For twelve years, each year has shown an increase in the demand for Moore's Air-Tight Heaters. It's the pleasing quality of Moore's Specialties which keeps pulling stronger year after year, and makes

THE EASY LINE TO SELL

JOLIET STOVE WORKS, Joliet, Ill.

60 HOLBROOK, MERRILL & STETSON, San Francisco, Sacramento, Los Angeles.

THE SUN STOVE COMPANY

DETROIT, MICHIGAN.

MANUFACTURERS OF

SUN STOVES

Gasoline, Oil and Gas Stoves,
Ovens and Oil Heaters,
Hot Blast Smoke Consuming Coal Heaters,
Air-Tight Heaters for Wood,
Gasoline Torches and Lamps.

Our Sun Hot Blast Smoke Consuming Coal Stove for soft or hard coal is not equaled by any on the market. Consumes **90 per ce t** of smoke of soft coal. Does not clog the chimney with soot, and throws out a greater heat than any base burner. Construction and finish the very best.

The Sun Air-Tight

Stoves for Wood are all strictly up-to-date in finish and construction. None are better made. We make all the selling sizes.

A TRIAL ORDER WILL CONVINCE YOU.

HOT BLAST FOR COAL. AIR-TIGHT FOR WOOD.

Western Agents: W. D. SAGER, 38 & 40 Michigan St., Chicago., Ill., Wholesale Agent for Chicago and the Northwest.
GILLE MFG. CO., Kansas City, Mo., Wholesale Agents for the Southwest.

"Education Consists in Getting on to Your Job"
Hawley Smith.

THE ANTHRA
Cinderella Double Heater

THE DUSTLESS OAK FOR ANTHRACITE.

For years we have been students at "The School of Experience" for Stove Makers. We have been faithful and have absorbed considerable knowledge of the art.

Critics cl: s us as A. Ms. & Ph. Gs. in the line, and we plead guilty to these titles.

The stove shown here is but one of the large number of our products, that we submit in evidence when some thoughtless or uninformed "one" challenges us to "make good."

THE EXCELLENCE OF THIS PIECE OF GOODS MAY BE BRIEFLY ACCOUNTED FOR AS FOLLOWS:

Air Tight Mountings.
Grates operated with stove tightly closed.
Large radiating surface. Heavy castings.
Special and exclusive draft controlling device.
Elegant design and rich nickel.
The right price.

THESE ARE FACTS THAT WON'T RUB OUT.

Pittsburgh Stove & Range Co.

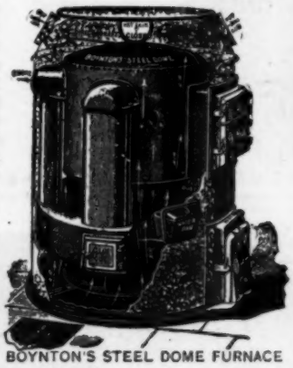
PITTSBURGH, PA.

Western Agency, W. D. SAGER, 38 to 40 Michigan St., Chicago, Ill.

1903

THE ONLY GENUINE

BOYNTON Heaters



BOYNTON'S STEEL DOME FURNACE

FURNACES, COMBINATION, HOT WATER AND STEAM.

ALWAYS UP-TO-DATE.

Reliable, Economical, Best Known, Easiest Handled. A Postal Will Bring Full and Definite Information.

The Boynton Furnace Co.,

207-209 Water St., New York

147-149 Lake St., Chicago

1903

Van's

Pat. Improved Wrought Steel Portable

Range

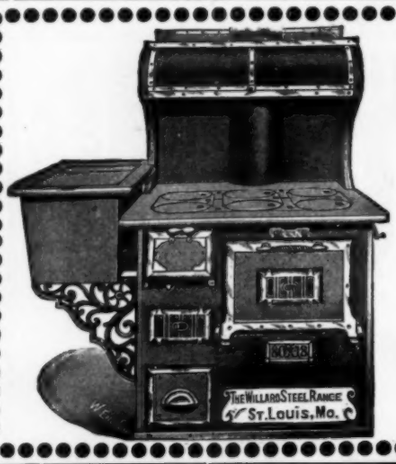
For HOTELS, RESTAURANTS, PUBLIC INSTITUTIONS, BOARDING HOUSES and PRIVATE FAMILIES.

All Kinds of Hotel Implements for Culinary Purposes.

Manufactured and For Sale by

The John Van Range Co.

419 Elm and
410, 412, 414 & 416 Home Sts.
CINCINNATI, OHIO



Ha! Ha!

The retailer who handles the *Willard Steel Range* can laugh at catalogue house competition. Low Price and High Quality are convincing arguments in its favor and tell the story of its success.

Wm. G. Willard, Mfr.

619-621 N. Fourth St., ST. LOUIS, MO.

EMPEROR FURNACES

For Wood

SIMPLE SAFE DURABLE

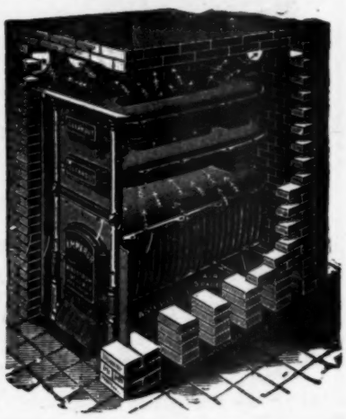
The Best and Cheapest Line of Wood Furnaces

FURNISHED FOR EITHER BRICK OR GALVANIZED IRON CASING.

Send for Catalogue.

Bergstrom Bros Co

NEENAH, WIS.



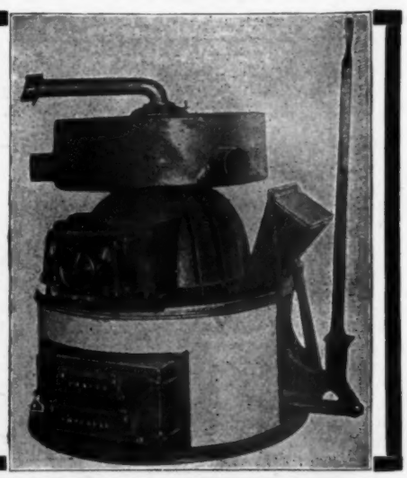
CLARK'S CELEBRATED UNDER-FEED FURNACE.

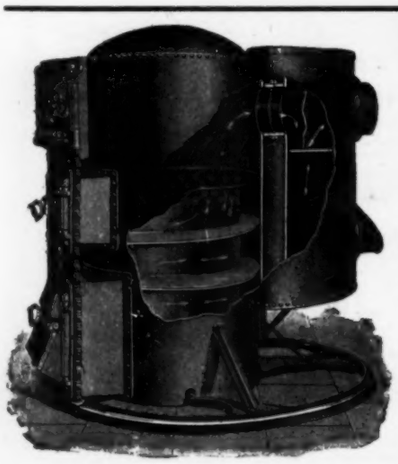
Is the best heater on the market for burning the cheaper grades of slack and nut coal.
Every part of this furnace is made with great care, and is very strong and durable.
The feeding device is hung oscillating.
The radiator is on the top.
The entire furnace is cast iron.
It has but three joints.
It is a comparatively smokeless furnace.
The grate does not shake but revolves.

WRITE FOR CATALOGUE

W. A. CLARK & CO.

35 PIKE STREET :: :: :: COVINGTON, KY.





WEIR ALL STEEL GAS AND SOOT CONSUMING FURNACE.

THE HEAVIEST STEEL FURNACE MADE.

Absolutely Gas and Dust Tight. A Great Heat-Producer, but a Fuel Saver.

MANUFACTURED BY

THE MEYER FURNACE CO.

1300-1304 S. Washington St.,

Send for Catalogue. **PEORIA, ILLS.**

"The HANDY FURNACE PIPE"

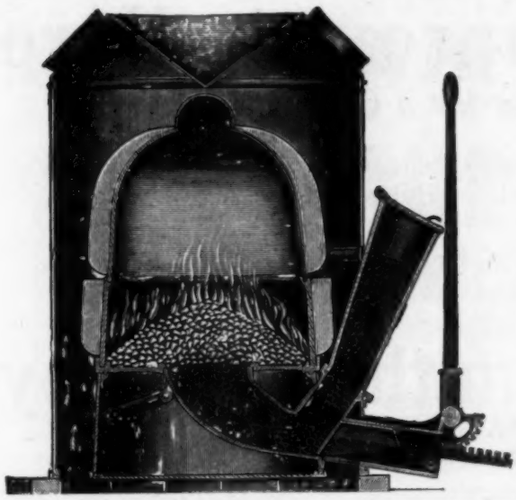
Made with a View of Being Safe.

The saving of labor in putting it up really makes it the cheapest hot air pipe on the market.

MANUFACTURED BY

F. MEYER & BRO. CO.

Send for Catalogue. **PEORIA, ILLS.**



Go Boldly

Mr. Dealer to the man who thinks of putting in a new furnace and tell him he can save half his coal bill if he installs an **Underfeed furnace.** You will find this the way to make money in the furnace business. The cut shows a section through furnace and casing, showing feeding mechanism and rotary grate. Write for catalogue.

...The Western...
Furnace & Foundry Co.,
1218 Harney St., Omaha, Neb.

WRITE FOR CATALOGUE.

We Invite You

To examine the merits of this

Excellent Furnace.

The CHAPPELL is all cast iron.
The CHAPPELL burns long wood or coal.
The CHAPPELL has seamless radiators.
The CHAPPELL has long fire travel.
The CHAPPELL has only eight joints.

The Chappell Furnace Co.,
MORENCI, MICH.

THE RECORD

of the

FLORAL CITY

Furnaces during the past ten years has never been equalled. They are, as a line, the best fitted and most powerful, economical and durable furnaces made, and we stand ready to prove this at any time by actual test. Perfect castings, skilful workmanship, careful supervision, these are the features that mark the superiority of the Floral City.

Monroe Foundry & Furnace Co.
MONROE, MICH.

WILSON & LESLIE, SOUTH BEND, IND.,

WRITE:

"We are surprised at the great circulation of THE AMERICAN ARTISAN as we have received letters from a great many different states."

The Improved Hero

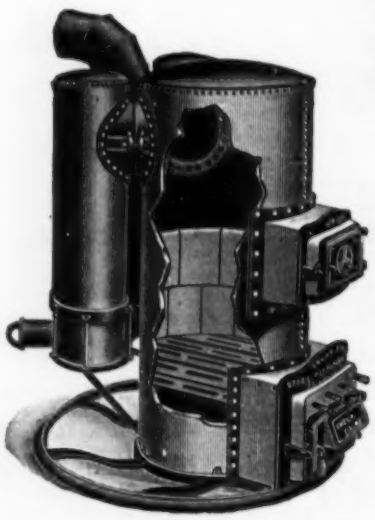
Is the Best for a COLD CLIMATE

Deep Ash-Pit. Each Grate-Bar Shakes Separately.
No Cog-Wheels or Bolts Attached to Grate.

We make the Little Giant Hot Water Attachment.
Uneedit. Write us about it.

Chas. Smith Company

122 Lake Street, CHICAGO



Our Double Door

Added to the Front Rank Furnace for 1903 is especially adapted for wood or large lumps of coal.

Our new style grates are triangular and either side may be turned to the fire.

Why not write for our catalogue.

FRONT RANK STEEL FURNACE CO.
2301 to 2309 Lucas Avenue, ST. LOUIS, MO.

Crown Furnace

LOW DOWN TYPE.
MADE IN 4 SIZES.

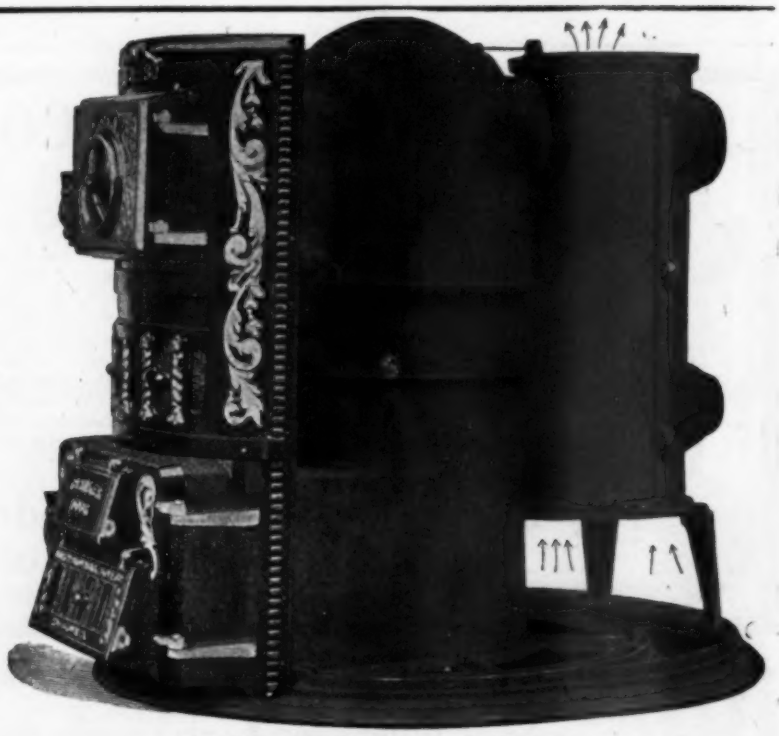
It has an extremely large amount of radiation for the size of the fire pot used. This furnace can be cleaned with the greatest facility.

It is made with smoke collar attachment and gas-burning arrangement when soft coal is used.

The furnace throughout is made extremely heavy and will stand severe usage.

March-Brownback Stove Co.

POTTSTOWN, PA.



The Crown Low Down Warm Air Furnace.

BRAND STOVE CO.

We make largest line of cooking and heating apparatus, cast cooks, cast ranges, steel cooks, steel ranges, hotel outfits, heating stoves, furnaces, hot water and steam heaters. Send for catalogue.

MILWAUKEE, WIS.

YOU CAN NOT EQUAL

THE

MUELLER

FURNACES and BOILERS

BEST GOODS.
RIGHT PRICES.
LARGEST LINE.
MADE FOR ALL KINDS OF FUEL.

Write for Catalogue and Prices.

EVERYTHING in the HEATING LINE

L. J. MUELLER FURNACE CO.

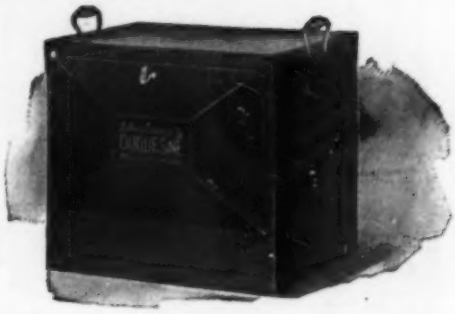
191 Reed Street. Established 1867. MILWAUKEE, WIS.

Write us for Prices and Catalogue

Price and Quality

MAKE VALUES.

The best values offered in **Gas Ranges, Hot Plates, Ovens and Cookers,** are sold under this name



SIMPSON

which means a guarantee

SIMPSON STOVE & MFG. CO. - OFFICE, PITTSBURG. WORKS, CANONSBURG.

OUR NEW LINE AIR-TIGHT STOVES

Send for Catalogue and Prices

Hopson Haftenkamp Company

Grand Rapids, Mich.

THAT PAPER IS THE CHEAPEST WHICH BRINGS THE BEST RESULTS IN PROPORTION TO ITS RATE, NO MATTER WHAT THAT RATE MAY BE.

The Improved Hero

Is the Best for a COLD CLIMATE

Deep Ash-Pit. Each Grate-Bar Shakes Separately.
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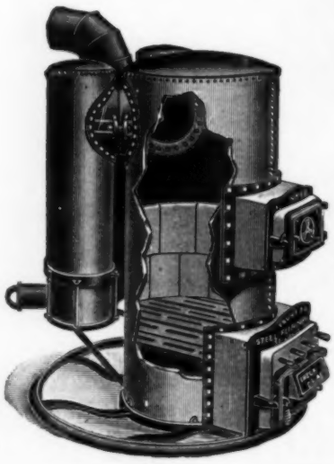
Chas. Smith Company

122 Lake Street, CHICAGO



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Crown Furnace

LOW DOWN TYPE.
MADE IN 4 SIZES.

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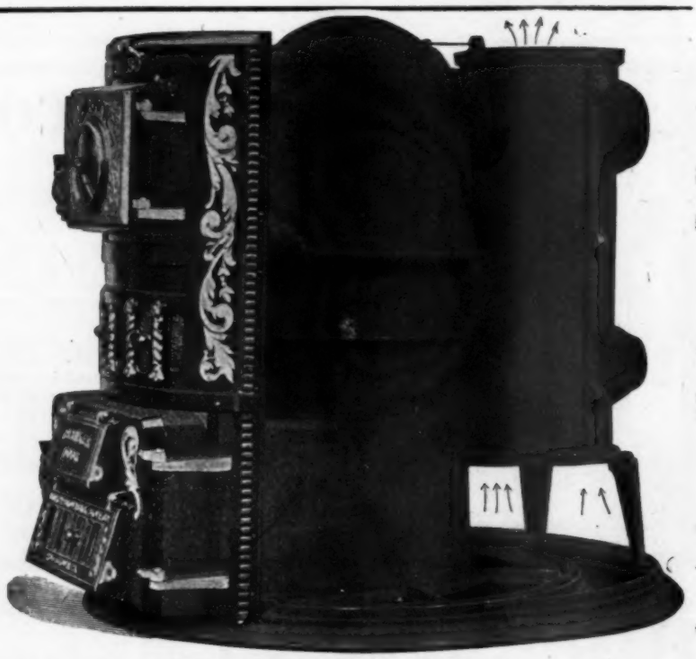
POTTSTOWN, PA.



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MILWAUKEE, WIS.

YOU CAN NOT EQUAL

THE

MUELLER

FURNACES and BOILERS

BEST GOODS.
RIGHT PRICES.
LARGEST LINE.
MADE FOR ALL KINDS OF FUEL.

Write for Catalogue and Prices.

EVERYTHING in the HEATING LINE

L. J. MUELLER FURNACE CO.

191 Reed Street. Established 1857. MILWAUKEE, WIS.

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SIMPSON

which means a guarantee

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Hopson Haftenkamp Company

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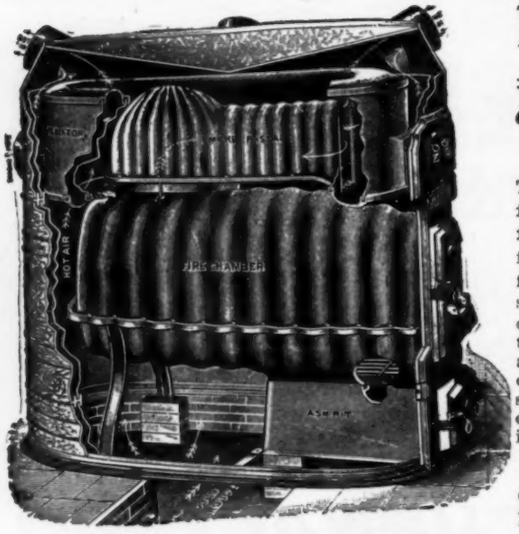
GILT EDGE FURNACES



THE MOST COMPLETE LINE MANUFACTURED FOR ALL KINDS OF FUEL. DURABLE, ECONOMICAL, GAS TIGHT.

***The* Jones Side-Wall Register . . . . . .**

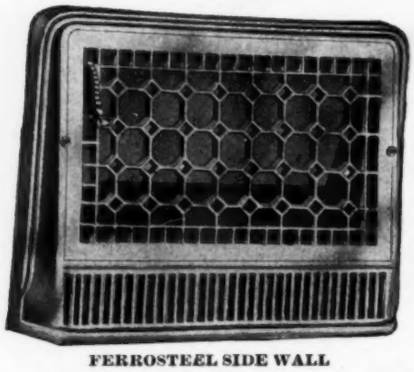
The only register having full capacity of hot air pipe for large living rooms or for heating a room on the first floor and extension to second. Has a face of neat design and not a hole in the wall when open. Has a regulator that holds the damper permanently in position. Can not get out of order. Double safety box included in each register.

Send us sketch for plans of latest method of heating with *GILT EDGE FURNACES* and *JONES REGISTERS*, least work, least pipes, least waste of heat, most economical.

R. J. SCHWAB & SONS COMPANY,

Manufacturers of Gilt Edge Furnaces and Northwestern Distributors of Jones Side-Wall Registers. MILWAUKEE, WIS.

FERROSTEEL REGISTERS

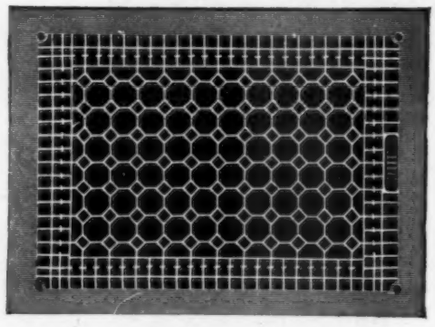


FERROSTEEL SIDE WALL

WORK

PERFECT MECHANISM
UNEQUALLED FINISH

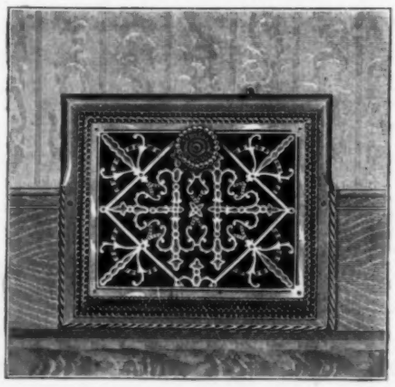
PRICES LOWEST
TERMS LONGEST
STOCK LARGEST



FERROSTEEL FLOOR

FERROSTEEL COMPANY, CLEVELAND, OHIO.

STOWELL SIDE WALL REGISTERS



THE LATEST AND BEST

Beautiful Design
Perfect Ventilation
All Finishes
All Sizes

Furnished with or without pipe

ADVANTAGES

Air tight.
No discoloration.
Noiseless.
Largest air capacity.
Ventilates both floors.
No cutting of carpets or floors.
No dust.

Address Register Dept.

STOWELL MFG. & FOUNDRY CO.,
South Milwaukee, Wis.

THE AUER WARM AIR GRATE

The one Practical Device for Furnace Heating.

Has greater capacity, **is better and cheaper** than registers. Gives the cosy comfort of the fireside. The little foot in the picture tells the story. Write for catalogue.

THE AUER REGISTER CO., Toledo, O.

377 Broadway, New York.
123 Franklin Street, Chicago.

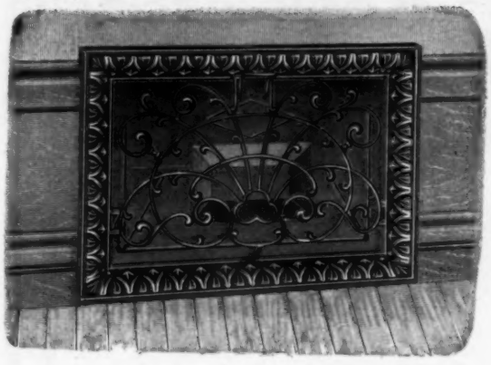
L. B. HOOKER, Sturgis, Mich., writes:

"Your paper is a grand success. I believe no tinner or plumber should do without it. I try to keep up with the times and the only way is to find out what other shops are doing, and the way to do that is to take The American Artisan."

BETTER THAN ALL OTHERS

CHEAPER THAN MOST OTHERS.

The Mueller Wall Register



To Open, Push Down Lever with Foot.

HAS NO EQUAL FOR SIMPLICITY, DURABILITY, CAPACITY and BEAUTY.

NOTHING TO GET OUT OF ORDER.

To Close, Push Up Lever with Foot.

A Child Can Operate It By a Light Pressure of the Foot.

WRITE FOR PRICES.

L. J. MUELLER FURNACE CO.

191 REED STREET Established 1857. MILWAUKEE, WIS.

TO OPEN, PUSH INWARD AT TOP.

Symonds Wall Register

SEND FOR FREE SAMPLE

Symonds Mfg. Co., East St. Louis, ILL.

TO CLOSE, PUSH DOWN AT BOTTOM.

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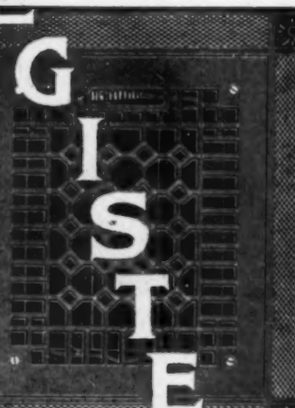

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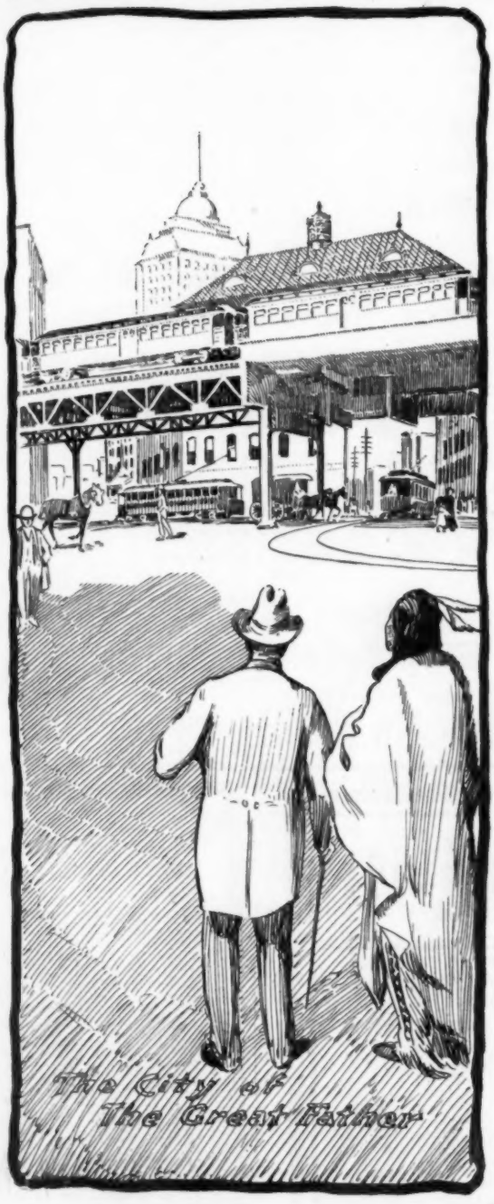

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42

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

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CHICAGO, APRIL 18, 1903.

A NEW idea is a talking scale that will sing out "2 pounds 7 ounces," or whatever the weight of a customer's purchase happens to be.

THE imports of merchandise into the Argentine Republic for 1902 amounted to $103,039,256, while the exports were valued at $174,486,727.

THE demand of the average American for silk manufactures must be steadily and rapidly increasing. Measured by the barometer of the imports of raw silk, the activity of the manufacturers of the country must be far in excess of any preceding year, while the importations of manufactured silks are also greater than for many years.

IT is to be regretted that the Indiana Supreme Court have declared the minimum wage law of 1901 unconstitutional. This law provided a minimum rate of wages for unskilled labor employed by municipalities and other political divisions. The court declared that this law interfered with liberty of contract, and was class legislation inimical to the constitution.

CANADIAN import figures indicate that the manufactures and merchandise of the United States are popular with the people of that country. The statistical statement of Canadian commerce, just received by the Treasury Bureau of Statistics, covering the commerce of the seven months ending with January, 1903, shows that Canada imported from the United States during that time 67 million dollars' worth of merchandise, against 32 million dollars' worth from the United Kingdom and 21 million dollars' worth from all other parts of the world. In other words, the United States supplied 56 per cent of the imports of Canada in the seven months ending with January last, the United Kingdom supplied 27 per cent, and the remaining portions of the world 17 per cent.

THE growth in the exportation of manufactures from the United States and their distribution to countries and grand divisions are discussed in much detail in a monograph in the April Summary of Commerce & Finance. It shows the exportations of manufactures in each year from 1790 to the present time and their distribution country by country and article by article in each year from 1892 to 1902. The exportation of manufactures has grown from $1,243,547 in 1790 to $17,580,456 in 1850, $102,856,015 in 1880, $151,102,376 in 1890, and $403,641,401 in 1902. In 1790 manufactures formed 6.15 per cent of the total domestic exports; in 1850, 13.03 per cent; in 1880, 12.48 per cent; in 1890, 17.87 per cent, and in 1902, 29.77 per cent. This shows that the exports of manufactures are increasing much more rapidly than those of other great classes of the exports.

ACCORDING to Frank H. Mason, United States consul-general at Berlin, Germany produced 48,687,000 tons of potatoes in 1901. Furthermore, this alleged production of a ton of tubers per every man, woman and child in the empire naturally raised the serious problem of how to dispose of them without waste or so depressing the market price that there would be no profit for the farmer left. The first result was a tremendous increase in the production of potato alcohol during the autumn and winter months, a consequent oversupply of raw spirits on the market, and the exposition of 1902 in Berlin to illustrate, promote and extend by all practical means the use of denaturalized alcohol for technical and industrial purposes. The exposition has been repeated this year on a broader and more comprehensive scale, in that it now covers not merely the alcohol industry, but the cultivation and the several principal uses of potatoes. At this exposition all kinds of devices for heating, cooking and lighting were shown, and there is a possibility that in the future when coal is exhausted the human race will derive their food, clothing, fuel and light from the humble potato.

DUN'S REVIEW has been tabulating statistics concerning the cost of living and from these it would appear that beginning with 1893 there was a gradual decline in quotations, due to industrial depression, and the fall culminated on July 1, 1897, at $72.455. At first glance it might appear that the consumer was most fortunate at that date, since the same quantities of the same articles were available at $20 less than a few years earlier. Unfortunately, such was not the case, although it might have been if earnings had remained unchanged. As a matter of fact, the low prices resulted from just that loss in purchasing power. According to the estimate of a labor leader, there were three million idle workers at that time, or there had been during the months immediately preceding. This meant that a vast army was subsisting on charity or their small savings, and able to purchase few of the commodities ordinarily used in abundance. When business revived the situation changed rapidly, and

quotations resumed a normal level. Increasing industrial activity and steadily advancing wages have carried the record above $100, the highest record of recent years being attained on May 1, 1902, at $102.239. Some inflation through crop injury by drouth was recorded in food stuffs at that time, but the present level is but little lower. Yet it would be a mistake to infer that the consumer has suffered by the higher cost of living. On the contrary, with labor well employed at the highest wages ever known in this or any other country, it is no hardship to pay the higher cost of commodities, while reports of savings banks and life insurance companies indicate that an enormous sum is being put away notwithstanding higher prices.

GRADUALLY the light of western enterprise is breaking into the shell of Chinese segregation and the antiquated and perhaps antediluvian scholarship, manufacturing and transportation systems that have been so long unmolested in the land of the Celestials is being dissipated before the advance of occidental civilization. The heathen Chinese is commencing to grasp the distance—annihilating properties of the bicycle, and Henry B. Miller, our efficient Consul at Niuchwang, declares that the possibilities of the market are limited only by the abilities of the Chinaman to purchase. A special study of the character of bicycles suited in China will greatly increase the sale. In north China men travel extensively, and they would use the bicycle much more if it were brought within their means. The roads are somewhat rough, and a substantial vehicle is required to traverse them. The Chinaman is not a great mechanic and has little ingenuity, and wheels for his use should not be delicate or require much in way of repairs. On account of their manner of dress they generally prefer wheels designed for ladies. Strength, durability and cheapness, rather than lightness and comfort, should be the main features of bicycles designed for that market. A Chinaman will sit all day on horseback or in a cart in a position that would be simply unbearable for a foreigner. The people in China will not want to pay for luxury.

RANDOM SKETCHES.

BY SIDNEY ARNOLD.

NO POUTER pigeon ready for a prize at an exhibit can show more "puffeduppishness" than myself as a perusal of this column has proven the flint that has caused the sparks of poetical genius of Bill Willard, the peerless Marshalltown, Ia., tinner and poet, roofer and versifier, to burst forth into a mass of scintillating irradiance that becomes herewith the bright particular star in my myriad galaxy of hardware poems. My recent comments on the Kansas anti-snake eating bill may have appeared rather stilted to some—its humor forced and its comparisons far fetched—some may have contemptuously turned them aside as wanton gibberish—but Bill, dear Bill, he understood. Their hidden meaning was as an open book to one gifted with his psychic insight. It was a case of soul meeting soul, affinity hobnobbing with affinity, heartstring grappling with heartstring, and Iowa, grand old Iowa, which has given us the Cherry sisters in the realm of the dramatic, now gives us Bill Willard in the realm of the poetical. His masterpiece on this sentimental subject is subjoined:

To Sidney Arnold.

Stanza I.

Sidney Arnold is his name,
Writes for THE AMERICAN ARTISAN and for fame.
He is behind the times, Oh, Law Sakes,
In scribbling about Kansas law and Snakes.

Stanza II.

He thinks Kansas just for fun
Has passed a law, such as this one,
Against snakes and things that live.
A little advice to Sidney I will give.

Stanza III.

This law, dear Sidney, you should know:
Is not against anyone but a show;
A person who goes on the corner of a street
And stands among snakes with his bare feet.

Stanza IV.

He takes a snake and eats him down,
Just to show the crowds around;
Now, Sidney, just watch my rhyme
"Pass into the show all for a dime."

Stanza V.

Kansans won't have such things of late'
To come into their lovely state,
Who eat snakes and toads and lizzards
And such vile stuff to fill their gizzards.

THE London Ironmonger recently sent out a card stating that it "closed for the press A. M. March 24. Late copy and blocks must reach us by morning post certain. It is posted at home and abroad March 27." A few American hardware monthlies show even more accentuated pokiness in issuance, but happily there is little room for somnolent publishing in America.

* * *

From the Economy Correspondence of the Richmond, Ind., item of April 8th, I learn that "Charley Atkinson has purchased the old drug store corner, together with Alves Mendenhall's hardware store. He sold the shop to C. G. Williams, who has had it removed to his lot on Main street, and will build an addition to it and rent it for a dwelling house. Emer Weaver bought the main store building, which is being moved to the east side of the lot, to be occupied by the owner for a harness shop. Mr. Atkinson will erect a new two-story business house on the old site and move his hardware and furniture into it." I hope they will know where they are "at" when all these changes are made.

* * *

WHAT's your pet commercial antiquity, Mr. Hardware Dealer? With some dealers it's an old stove vintage of 1880, with some hinky-dink contraption about it somewhere that the manufacturers decided would be a sure winner and which fell flat. How about that washing machine, new fangled in 1890 perhaps, but a back number to-day that the persuasive salesman induced you to buy in a thoughtless moment? If you are hanging on to some relic like this cheerily hoping to make some good customer an enemy for life by working it off on him you will sympathize

with this British hardware dealer mentioned in the Hardware Trade Journal: "Not long ago we were in the shop of an old-established ironmonger, who, though doing business upon a fairly large scale, could not in any sense be considered to fall within the range of a typical ironmonger. He pointed to a cream separator covered with dust, and presenting an appearance of neglect which, could it have spoken, might have given utterance to sentiments most abjectly miserable. It had been in that corner for years. It represented one of the early patterns made by a British house. Notwithstanding its being so utterly out of date, the ironmonger clung to the hope that some day a customer would come along and buy it."

* * *

Is a bridle a part of the harness? This would appear to be a very easy question, but owing to a quarrel over its solution 1,200 miners of the Beech Creek Coal and Coke Co., at Patton, Pa., are idle. The contract of the drivers was that all mules should be harnessed, and the stable men harnessed them, but they would not put on the bridles, claiming that that was not a part of the harness, whereupon the drivers struck.

* * *

THE late Gustavus F. Swift, the Chicago packer, attributed his success to his unswerving following of certain maxims. Among these are the following:

1—The man that doesn't know his business from the top clear down to the bottom isn't any kind of a business man.

2—No young man is rich enough to smoke twenty-five cent cigars.

3—Next to knowing your own business, it's a mighty good thing to know as much about your neighbor's as possible—especially if he's in the same line.

4—The best a man ever did should not be his standard for the rest of his life.

5—The successful man of to-day worked mighty hard for what he got; the man of to-morrow will have to work mighty hard to get it away.

* * *

DO HARDWARE men make sufficient attempts to win the attention and approval of the ladies? I do not mean personally. Good gracious, no. Anyone who ever saw a hardware man after business hours knows that he is possessed of a dignified gallantry; a courteous and insinuating address and a subtle masculine charm of manner that makes him simply irresistible. In over-the-counter treatment of lady customers, the hardware man and his clerk, while not so obsequious perhaps as the dry goods man, yet treat the gentler sex with a gracious and consistent courtesy. But there is another aspect to this question. The ladies have a chronic shrinking from dirt and disorder. "Spotless Town" is their ideal community, and no petticoated youngster is allowed to blossom into pulchristudinous womanhood without having the scriptural injunction that "cleanliness is next to godliness" drummed into her ears pretty frequently.

Some hardware stores are clean; some are not; some are systematically arranged; others are a chaotic maelstrom of higgledy-piggledy nondescripts.

Is there any hope of making a hardware store popular in the sense that a dry goods, a florist's or a jewelry store is popular? The hardware merchant or clerk after has due regard for neatness, but does not seem to realize that artistic effects are possible or would be appreciated in a hardware store. There are nevertheless many lines which the hardware man sells which could be made to add to the attractiveness of his store from a feminine standpoint or a masculine one as well. It would be folly to try to make artistic a display of staples, such as nails, rope, window glass, metals, etc., but if such lines as cutlery, silverware, housefurnishings, lamps and sporting goods were attractively arranged in the store they could be made as interesting a feature as could be shown a dry goods man or furnishing store.

Canadian Hardware of April 11th contains the following interesting article *apropos* this subject:

"The representative of a large English brass and copper art furnishings house remarked to the writer this week that Canadian hardwaremen did not make nearly as good use of housefurnishings as is done by the English ironmonger. With the latter this line not only directly adds to his aggregate trade and to his net income, but it is made one of the most popular features of his store, because of its own beauty and attractiveness. The English ironmonger's store is consequently, he believes, a more popular store with all classes than the Canadian hardware store."

* * *

ACCORDING to F. Bonsall of Smith, Lyon & Field, New York City, in a recent interview, there was not a spade or shovel to be had in New York City on April 9th.

* * *

THE Kentucky Court of Appeals has made an eminently fitting decision in the case of The Western Union Telegraph Co. vs. Parsons. It appears that a telegram was sent to the appellee apprising her of the death of her son at 6 p. m. May 23,1901, from Jellico, Tenn., and did not reach its destination, Greenwood, Ky., until 8:30 a. m., May 25, too late to enable her to attend the funeral, although her residence was only 200 yards from the office.

The court sustained a verdict against the telegraph company on the ground that it was the duty of the company to transmit and deliver the message within a reasonable time; that the delay was unreasonable, and that it was no defense that the agent at Greenwood had no porter or messenger by whom he could have delivered the message to the appellee, and that he was prohibited by the rules of the company from leaving the office. It is, the court said, the duty of a telegraph company to deliver messages, and it cannot shield itself from this duty by providing that the agent must not leave his office.

The business world generally will rejoice to note that the illegal attempt of a corporation to shield itself behind its self-devised rules has been checkmated. Allow the users of public utilities to have free sway in deciding how the people shall enjoy the use of these monopolies and the grip of these concerns on the commercial throat will be tightened to the point of suffocation.

News Siftings.

The United States Steel Corporation have obtained an option on vast iron ore deposits in Guerreroix, Mex.

A foundry is being built for the Western Stove Works at St. Charles, Ill.

J. W. Arnold, C. E. Vokes and E. C. Kelly are the incorporators of the Kenton Iron & Steel Co., Covington, Ky., capitalized at $50,000.

A. F. Fleshman, Frank Rothschild and D. Solis Cohen are the incorporators of the Air Tight Mfg. Co., Portland, Me., incorporated with a capital stock of $11,000 for the manufacture of stoves.

It is said that the United States Steel Corporation contemplate becoming an operating instead of a holding company, and that it will make its subsidiary concerns departments.

Archer M. McCrea of the American Sheet Steel Co. will, it is said, read a paper on "The Uses of Sheet Steel in Range Manufacture" before the convention of the National Association of Stove Manufacturers, which will open in Cleveland May 13th.

Representatives of the Washburn-Pillsbury Milling Co. of Minneapolis, Minn., have secured options on a large area of eastern Montana lignite coal fields. One of their directors is in Germany buying machinery for the briquette works, which this firm expect to establish at Bismarck, N. D.

The Joliet Stove Works, Joliet, Ill., send us some neat blotters calling attention to the fact that Moore's steel range with hinge top appeals to every woman instantly, as it offers such a handy way for broiling, toasting or fixing the fire. The oven thermometer and controller damper also help sell this range.

On April 10 Deputy Sheriff J. W. Farley levied on the plant and personal property of the Mississippi Valley Stove Co.'s plant at Fulton, Ill., by virtue of an execution issued by the court of Whiteside county, Ill., in favor of Mrs. Elizabeth Robinson, for $62,-238.62.

A dispatch from Indianapolis states that the American Association of Merchants has been formed to lobby against organized labor in the matter of garnishee bills and similar legislation. The Indianapolis Retail Grocers' Association have decided to limit credits in consequence of the action of the legislature on this bill.

NEW PLANT FOR JOHN VAN RANGE COMPANY.

The John Van Range Co., Cincinnati, O., will erect a $100,000 four-story fireproof building at Fifth and Broadway, that city.

The first floor will be used for the offices, salesrooms and the shipping department, and the upper floors for warerooms, when they are not devoted to manufacturing. It is expected that the structure will be ready for occupancy by May 1, 1904.

L. E. Ziegle of this company gave out the following interview concerning this new building on April 13 last:

"The John Van Range Company was compelled to move from the premises which it is now occupying on Elm street, as its factory is inadequate for the increasing demands for goods. The manner in which it is proposed to arrange the factory will very much simplify the details in the manufacturing department. We shall put in the very latest equipped machinery, which will enable the firm to turn out a greater volume of goods. All of the machinery will be operated by electricity, and an immense electrical plant will occupy the basement of the building.

"The John Van Range Company in making this move is imbued with the idea that business in this city is going east, and they believe that within a comparatively short time this location will be near the center of the best business part of the city. A great many manufacturers have gone to Norwood and other points near the city, by which means they have obtained large tracts of ground at moderate prices, but we adhere to the principle that it is better to be in the heart of the city, even though the ground costs more money, as we want to be accessible to city and foreign customers."

The buildings this firm are tearing down to make room for this plant are old Queen City landmarks.

PATENTED DOWN DRAFT OAK STOVE.

The accompanying cut shows the patented down draft oak stove, manufactured by the Peck-Hammond Co., Cincinnati, Ohio. The fire pot is at the top

Patented Down Draft Oak Stove.

of the stove, and the smoke pipe is near the base. All the heat is drawn to the floor. When fresh fuel is placed on top of the fire, all gases and smoke are drawn

through the fire to the base of the stove and consumed. This stove burns any kind of fuel and holds fire over night. It has a large ash drawer, which does away with dust and dirt in removing ashes.

UP-TO-DATE POEM MANUFACTURING.

It is an interesting sight to visit the "Advertising Poetry" department of the Champion Steel Range Co., 131-137 Viaduct, Cleveland, O. Passing their busy mounting and other departments, one finds oneself in a section 83x149 feet in dimensions, amply provided with dictionaries. These are treated to hydraulic pressure that takes out the words and leaves the definitions. These words are put on an endless conveyer and are ingeniously sorted by an automatic sorting machine. They are next adjusted by a 7-h. p. electric adjuster and then go to the trimming machine, where redundant dactyls and illegal iambs are sandpapered off. During a recent visit of the writer to Cleveland he saw the following poem manufactured. From the time the dictionary was fed to the hydraulic press until the completed poem was turned out of the appropriate hopper one minute and eighteen and three-eighths seconds was consumed. The smoothness of this machine-made poetry will be patent to all readers of the following lines:

What is home without a kitchen
Where the cook doth bake the pies,
And the odors of boiled cabbage
Linger while the corn-beef dries?

What is home without a cook
Who can biscuits make like mother's—
Crullers, doughnuts, gingerbread—
Other things that hunger smothers;

Things a boy does love to eat—
Swipes them, stuffs them down, perchance,
Till the cook, indignant, cries,
"Clear out, kid! Give sis a chance!"

What is home without a kitchen,
And a Champion Steel Range?
'Tis a dreary place to live in,
'Tis a house that's dull and strange.

But the home presided over
By a clever, gentle wife,
Is a palace, if the husband
Calls it "the best joy in life";

And if in a tidy kitchen
He has wisdom to arrange
For the best of all home comforts—
A Double Flue Champion Steel Range.

"IN THE WHITE."

The Gobeille Pattern Co., Cleveland, O., are making an up-to-date suggestion to the stove fraternity as follows: "Do you need new patterns or changes? Order of us now so you can inspect same 'in the white' when you come on to the convention N. A. S. M. next month.."

JUST A LITTLE SPLUTTER.

The plant of Pawling & Harnischfeger, Milwaukee, Wis., manufacturers of electric cranes, was visited by fire on April 15 last. The damage done was very trifling and was confined to one building only. Owing to their extensive quarters there will be no hindrance in their work, as they have ample facilities for caring for all the wants of the trade.

"OUR DRUMMER."

Butler Bros. send us their April number of "Our Drummer," which shows that they are truly inoculated with the virus of expansion. Their Chicago house has been fully settled in its new quarters since Jan. 1st, 1903. Feb. 1, 1903, their New York house succeeded our old friend Uncle Sam as tenant of the premises Laight and Washington streets, and by May 1 their new St. Louis house will be completed. Page 5 of this volume makes the sensational announcement that during April this firm will sell tinware 20 per cent under market prices; 2-quart coffee pots at 78c per dozen, 14-quart plain stamped rinsing pans at $1.57 per dozen, and 3½-quart white-lined enameled milk pans at $1.44 per dozen, are specimens of the offers made the trade by this house. In bicycles they offer the 1903 Century with G. & J. tire at $18.50, stating that the retailer can easily sell this at $23.50 to $30.00. The trade will find a great variety of low-priced goods listed in this volume, which will be forwarded them on request. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

ENTERTAINMENT FOR STOVE MANUFACTURERS.

The following arrangements have been made by the committees having in charge the entertainment and program, to be carried out during the convention of the National Association of Stove Manufacturers, which will be held in Cleveland on May 12th, 13th and 14th:

On the evening of May 12th there will be a theater party for the gentlemen and ladies.

On the afternoon of the 13th there will be a trip to the Olney Art Gallery, and a concert in the parlors of the Colonial Hotel by the Cleveland Philharmonic String Quartette for the ladies.

On the evening of the 13th there will be a smoker for the gentlemen in the Palm Garden of the Hollenden Hotel.

On the afternoon of the 14th there will be a drive for the ladies and gentlemen through the principal parts of the city, to the Euclid Golf Club, where a luncheon will be served.

AN INTERESTING OFFER.

The Briscoe Mfg. Co., Detroit, Mich., are making the trade a very interesting offer, as they agree to send the trade 40 pieces of O-Rib-O ware and oil cans and 60 pieces of high-grade Amethyst enameled ware for $22.22, freight prepaid, and 3 per cent off in 15 days. A steel rack japanned black with rotary sign in colors is included free with this offer. If the dealer does not like the goods after he gets them he can ship them back freight free and keep the rack.

Amethyst enamaled ware is a fine, high-grade, double coated ware, of a rich, dark amethyst color, flaked with white.

O-Rib-O pails and tubs are made from heavier stock and ribbed besides.

The Hardware Record.

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Treas., Henry Heick, Louisville.

Michigan Hardware Association.
Pres. T. Frank Ireland, Belding.
V. Pres., John Popp, Saginaw.
Sec., A. J. Scott, Marine City.
Treas., H. C. Weber, Detroit.
Ex-Com., J. B. Sperry, Port Huron; F. A Turner, Caro; J. G. Patterson, Detroit; F. S. Carlton, Calumet; S. E. Hunt, Detroit; Samuel Winchester, Jackson; Fred S. Cook, Fowlerville; C. E. Pipp, Otsego; A. Harshaw, Delray; A. J. Scott Marine City.

Minnesota Retail Hardware Assn
Pres., W. H. Tomlinson, LeSueur
V.-P., H. S. Cleveland, Minneapolis.
Treas., W. E. Barto, Long Prairie.
Sec., M. S. Matthews, Mnpls.
Exec. Com., W. H. Tomlinson, LeSueur; H. S Cleveland, Minneapolis; F. E. Hunt, Red Lake Falls; Benj. F. Kernkamp, St. Paul; C. H. Hornburg, New Ulm; J. Cowing, Alexandria; C. H. Casey, Jordon; C. F. Ladner, St. Cloud; J. Schmidt, Wabasha; A. T. Stebbins, Rochester; J. McGuire, St. Paul.

Missouri Retail Stove and Hardware Dealers' Association.
Pres., Tayler Frier, Louisiana.
V.-P., E. L. Wachter, St. Louis.
Sec., F. N. Neudorff, St. Joseph.
Ex. Com., J. W. Poland, Carrollton; F. N. Kannsteiner, St. Louis; W. T. Shoop, Richmond.

National Hardware Association.
Pres., R. A. Kirk, St. Paul.
1st V.-P., John C. Koch, Milwaukee.
2nd V.-P., Brace Hayden, San Francisco.
Sec.-Treas., T. James Fernley, Philadelphia.
Ex. Com., John Freeman, Detroit; Samuel B. Bigelow, Boston; P. E. Strauss, Boston; J. D. Moore, Birmingham; R. M. Dudley, Nashville; W. S. Wright, Omaha.
Advisory Board, W. W. Supplee, Philadelphia; H. H. Bishop, Cleveland; John Bindley, Pittsburg; R. W. Shapleigh, St. Louis.

Nebraska Retail Hdw. Dealers' Asn.
Pres. C. A. Peterson, Oakland.
1st V.-P. Nathan Roberts, Omaha.
d V.-P. Alex Meyer, Hastings.
3d V.-P. Frank Hecker, Friend.
Sec.-Treas., Harry Hall Lincoln.

National Retail Hdw. Dealers' Asn.
Pres., W. P. Bogardus, Mt. Vernon, O.
V.-P., C. H. Miller, Pennsylvania.
Sec., Treas., M. L. Corey, Argos, Ind.
Ex. Com, H. C. Cormick, Centralia, Ill.; Sharon E. Jones, Richmond, Ind.; T. F. Ireland, Belding, Mich.; L. Lindenberg, Dubuque, Iowa; A. T. Stebbins, Rochester, Minn.

N. Dakota Retail Hdw. Dealers' Asn.
Pres., H. N. Joy, Hamilton.
1st V.-P., H. F. Emery, Fargo.
2d V.-P., Frank Lish, Dickinson.
3d V.-P., H. B. Allen, Jamestown.
Sec., C. N. Barnes, Grand Forks.
Treas., W. H. Pinkerton, Lakota.
Ex. Com., E. E. Elliott, Sanborn; H. F. Strehlow, Casselton; Hurbert Harrington, Fargo.

Ohio Hardware Association.
Pres., W. P. Bogardus, Mt. Vernon.
V.-P. J. F. Baker, Dayton.
Cor. Sec., D. R. Burr, Piqua.
Fin. Sec., W. C. Jones, Columbus.
Treas., H. A. Waller, Ravena.
Ex. Com. F. A. Powers, Norwalk; Geo. Hartke, Cincinnati; E. Fisher, Wapakoneta; J. C. Snyder, Ironton; E. M. Potter, Cleveland.

Pennsylvania Retail Hdw. Assn.
Pres., Geo. L. Moore, Brownsville.
V.-P., Geo. J. Rudolph, Pittsburg.
Sec., J. E. Digby, McKees Rocks.
Treas., B. A. Maggine, Braddock.
Ex. Com., E. E. Lyon, Greensburg; C. N. Savage, California; B. A. Maggine, Braddock; C. O. Shroyer, Dawson.

St. Louis Stove Dealers' Assn.
Pres., Wm. H. Hahn.
1st V.-P., G. A. Pauly.
2d V.-P., E. L. Wachter.
Sec., Louis Boehl.
Treas., E. Wertz.

Southern Hardware Jobbers' Assn.
Pres., F. A. Heitman, Houston.
1st V.-P., Col. B. F. Eshelman, New Orleans.
2d V.-P., John Donnan, Richmond, Va.
Sec., C. B. Carter, Knoxville.
Ex. Com., W. M. Crumley, Atlanta, Ga.; O. B. Barker, Lynchburg, Va.; Chas. H. Ireland, Greensboro, S. C.; C. S. Speer, Hot Springs Ark.

Texas Hardware Jobbers' Assn.
Pres., Jas. Moroney, Dallas.
1st V.-P., J. C. Bering, Houston.
2d V.-P.-J. Burnsides, Ft. Worth.
Sec.-Treas., R. Bell, Weatherford.
Ex. Com., G. A. Trumbell, Dallas; F. A. Heitman, Houston; E. S. Hughes, Abilene; J. J. Dickerson, Paris.

Wisconsin Hdw. Dealers' Assn.
Pres., L. Findlesen, Green Bay.
V.-P., H. L. McNamara, Janesville.
Sec.-Treas., C. A. Peck, Berlin.
Ex. Com., J. Kornelly, Milwaukee; E. H. Ramm, New London; H. S. Scofield, Sturgeon Bay; R. Murdoch, Beloit.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 34 to 38 inclusive.

Paul Williams & Co. succeed Lloyd & Skjulstad in the hardware business at Auburn, N. D.

J. C. Barlow is among the incorporators of the Mississippi Hardware Co., Helena, Ark.

R. A. Kirk, the well-known St. Paul hardware jobber, has just returned from a visit to the Pacific coast.

The Janney-Semple-Hill Co., Minneapolis, Minn., wholesale hardware dealers, have increased their capital stock from $500,000 to $1,000,000.

The U. S. Screw Wire Nail & Machine Co. are a new Reading, Pa., concern, who will make wire nail machines.

T. K. Jones & Bro. Co. are a new Dover, Del., concern capitalized at $25,000 for doing a general hardware business.

The Crawfordsville Wire & Nail Co., Crawfordsville, Ind., will erect a galvanizing plant 200x250 feet in dimensions.

McRae & Son, 112 North James street, Rome, N. Y., have sold their stove and tinware business to Relyea & Rockwood.

Chas. W. Platt, Aug. T. Eaton and Frank W. Higgins are the incorporators of C. Platt's Sons' Cutlery Co., Olean, N. Y., capitalized at $45,000.

Joseph M. Loughlin, M. Fondray and Benjamin C. Hawkes are the incorporators of the G. P. Paint Manufacturing Co., Chicago, capitalized at $10,000.

Edward P. Beals, Sr., member of the firm of Beals & Co., Buffalo, N. Y., hardware dealers, died April 9 of pneumonia. He was in the 82d year of his age.

Valentine Elcoro & Co., a leading Mexico City, Mex., hardware concern, are about to construct an extensive aluminum smelting plant in Jalisco, Mexico.

The hardware store of P. J. Sundberg, 203 Fifteenth street, Moline, Ill., was completely destroyed by fire as the result of a flash of lightning on April 11 last.

C. T. Fitts, Fred C. Swan, Arthur W. Ivens and Dana W. Fitts are the incorporators of the Sioux Hardware & Heating Co., Sioux City, Ia., capitalized at $25,000.

H. L. Butts, George C. Butts and Charles R. Butts are the incorporators of the Chelsea File Works, Norwich, Conn., capitalized at $6,000, for the manufacture of files and rasps.

The Sand Point, Idaho, policemen have arrested a couple of crooks who have been making a specialty of robbing hardware stores throughout Montana and other Western territory.

G. E. Roesch, W. Ivor, E. S. Lancaster, are the incorporators of the Roesch Manufacturing Co., Aurora, Ill., capitalized at $25,000. They will manufacture a line of hardware specialties.

Charles F. Drake, Lucy L. Drake, Chas. S. Bahney and Julia V. Bahney are the incorporators of the Drake-Bahney Hardware Co., Carthage, Mo., capitalized at $10,000.

W. A. Pardee, formerly with the Whitman-Barnes Co., Akron, O., is the principal stockholder in the Pontiac Hardware Specialty Co., Pontiac, Mich., who will make axle nuts and other specialties.

C. E. Brubacker is president, N. B. Campbell is vice-president, and J. J. Campbell is secretary and treasurer of the Brubacker-Campbell Hardware Co., Salt Lake City, Utah, capitalized at $25,000.

Fred H. Pell, Caroline Pell, Thomas Willins and Oscar Kahnweiler are the incorporators of the Fred H. Pell Co., Newark, N. J., capitalized at $10,000, for the manufacture and sale of general hardware.

The Vilter Stamping Co. of Loveland, O., have incorporated with a capital stock of $50,000. They will manufacture tin, japanned and galvanized ware, and will deal in tin plate, metals and tinners' supplies.

Henry B. Newhall, Henry B. Newhall, Jr., and William A. Henstenberg are the incorporators of the Newhall Chain, Forge & Iron Co., Plainfield, N. J., capitalized at $80,000, for manufacturing and dealing in chains.

Frank J. Mundy, Simon Faber and John C. Risley are the incorporators of the Automatic Sanitary Dish-Washing Machine Co., Atlantic City, N. J., capitalized at $8,000, for the manufacture of dish-washing machines.

The Sitterly Novelty Works, Auburn, N. Y., are manufacturers of a line of hardware specialties, including the King carpet stretcher, tack hammer, tack puller, mincing knife, carpet beater, clothes line holder, broom holder, tea pot knobs, etc.

N. A. Gladding, vice-president and secretary E. C. Atkins & Co., Indianapolis, Ind., saw and saw tool manufacturers, has been appointed as one of the commissioners from Indiana to the Louisiana Purchase Exposition and World's Fair, to be held in St. Louis in 1904.

More than 10,000 tons of wire, wire nails and pipe were exported through New York and other eastern seaboard points last month from Pittsburgh and other Pennsylvania plants of the American Steel and Wire Company and the National Tube Company, branches of the United States Steel Corporation.

The Blacklock Foundry, South Pittsburg, Tenn., send us a little card showing a lady holding up one fo their sad irons, while her little girl is looking at her face mirrored in the polished surface of same. This card states that "The name 'Blacklock' found on the handle of every sad iron we produce insures satisfaction that is always pleasing."

Once more the loaded revolver gets its deadly work in in a hardware store, as O. M. Tobin, 17 years old, a clerk in the employ of Henry Merrill, a hardware dealer at 490 Grand street, New York city, was accidentally shot while showing a revolver to Frank Krause, a customer. Krause pressed the trigger to try the pistol, and the shot entered the boy's right leg.

The stockholders of the Briggs-Centers Hardware Co., Neosho, Mo., held their annual meeting recently and elected the following officers: President, H. D. Dean; vice-president, H. F. Speakman; secretary, S. D. De Lappe; treasurer, E. C. Coulter; general manager, J. H. Centers. The following were then elected directors: J. H. Centers, H. D. Dean, H. F. Speakman, E. M. Frost and J. T. Sturgis.

On April 7th the Smith & Winchester Hardware Co. of Jackson, Mich., gave quite an elaborate exhibition in their show window. Among the other feats shown was that of a man lifting another man of his own weight above his head with one hand; breaking a chain of 1,500 pounds resistance; bending a six-penny spike double with his bare hands, also driving one through a plank with his bare fist; breaking several strands of steel wire around his chest, etc. This exhibition drew quite a crowd to this store.

The J. Stevens Arms & Tool Co., Chicopee Falls, Mass., change their New York office to-day from 80 Chambers street to 98 Chambers street. A year ago they moved from 318 Broadway to 80 Chambers street, believing that their present quarters would be ample for taking care of their increased business, but they found that they were cramped for room and have been forced to move again to these new quarters, where they will have four times their present space and better facilities than ever for the prompt dispatch of their business. Their factory at Chicopee Falls has also shown a marvelous growth, as their force of men has increased from 44 to 1,100 in the past seven years.

The Washington Hardware Association send us a little brochure giving their constitution and a short history of the state.

The next annual meeting of this association will be held at Whatcom Nov. 11 and 12. The officers of this association are:

President—J. A. Becker, Fremont.

Vice-President—L. B. Quackenbush of Morse Hardware Co., Whatcom.

Secretary—Walter M. Olive, Mission.

Treasurer—G. M. Cochran of Snohomish Hardware Co., Snohomish.

Executive Committee—J. A. Becker, L. B. Quackenbush, Walter M. Olive, G. M. Cochran; elected, G. W. Shannon, Anacortes.

AN INTERESTING CATALOGUE.

The Schreiber & Conchar Mfg. Co., Dubuque, Ia., send us their illustrated 1903 hardware catalogue. The front pages of this volume are devoted to views of different of the manufacturing buildings of this company. Their line of goods includes B. O. E. sad irons, 400 irons, hot air registers, stove pipe registers and ventilators, Comfort dampers, Star and Crescent damper clips, cylinder heads, clothes line reels, reducing rings, stove pipe shelves, Star and Crescent waffle irons, Everlasting chimney caps, new S. & C. combined anvil, vise and pipe holder, Star anvil and vise, clamps, farming tool brackets, corn shellers, sanitary stock waterers, oblique store door handles, Hawkeye barn door latches, Roggins thumb latches, drawer

pulls, chandelier hooks, reflector lamp brackets, foot scrapers, stanchion irons, screw drivers, etc.

Their 400 sad iron is a double pointed heavy iron made to hold heat. The base is a solid block of metal with ends so formed that they will retain heat as long as the center. The top plate is lined with asbestos to prevent the heat from reaching the hand.

The Everlasting chimney caps are made of cast iron and fit any chimney.

The Key City spade or shovel bracket will hold six shovels or spades, any one of which may be removed from the bracket without disturbing the remainder.

The malleable handle of the Hawkeye screw driver is not cast on, but is forced on with a powerful press. There are five square holes in the handle for turning different sizes of nuts, while the sides can be used for drawing nails and starting screws. One of these catalogues will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

MINERS' BELT OIL CANS.

The accompanying cut shows the miners' belt oil can manufactured by Cooney & Geiger, Indianapolis, Ind. Joseph Swisher, Diamond, Ind., a practical miner, is the inventor of this can, which may be tilted to discharge its contents into lamp or torch without the necessity of detaching the can and which will remain in an upright position, irrespective of the numerous positions assumed by the miner, while at his work. The feature of the patent consists of the belt loop being attached to side of can by means of a specially constructed rivet which acts as a swivel. Owing to the fact that the loop is fastened close to the top of can, same will right itself as the heavier portion is below its horizontal axis.

Miners' Belt Oil Cans.

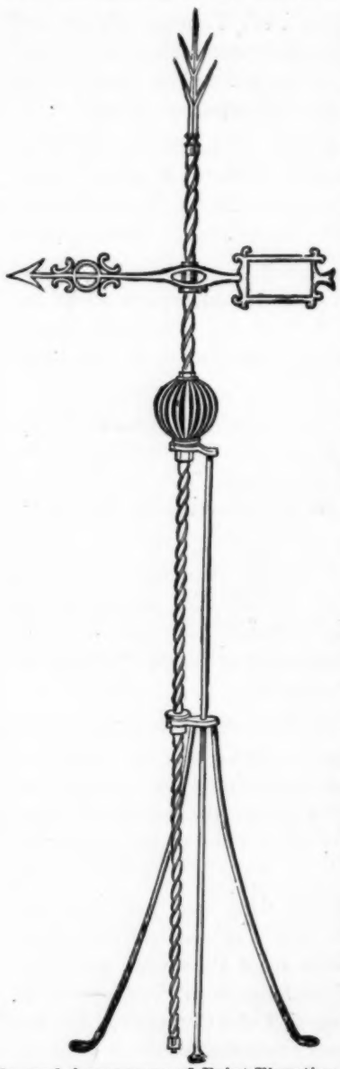
UNCLE SAM'S MAIL BOX.

The C. A. Peck Hardware Co., Berlin, Wis., are very busy filling orders for their Uncle Sam's mail box shown in the accompanying illustration. This mail box has an important margin in the matter of price and can be sold by the dealer at a low price at a handsome margin of profit. The cut does not do justice to the appearance of this mail box, as it is made of No. 22 galvanized iron neatly striped in red, with double seamed joints in all parts. It has a storm-proof drop-letter slot with an inside flap; an inside penny box, where money may be left for postage for letters for the postman to mail, and an outside hook attached to the framework, for holding packages or parcels too large to go into the box. The padlock hasp is very strong, and cannot be removed, pried open or broken. The cover cannot blow open, and when it is opened exposes the interior of the box to plain view.

Uncle Sam's Mail Box.

LIGHTNING RODS.

The accompanying cut shows one of the lightning rods manufactured by Edward A. Foy & Co., 640 Main street, Cincinnati, O. Their copper wire cable lightning rods comprise 28 strands and there are 28,000 feet of copper wire in each 1,000 feet of cable. These strands are effectually wound so as to maintain the greatest conductivity. Their cables of sizes up to one-half inch are reeled on spools of 500 feet each, and those of larger sizes are reeled in 250 feet lengths.



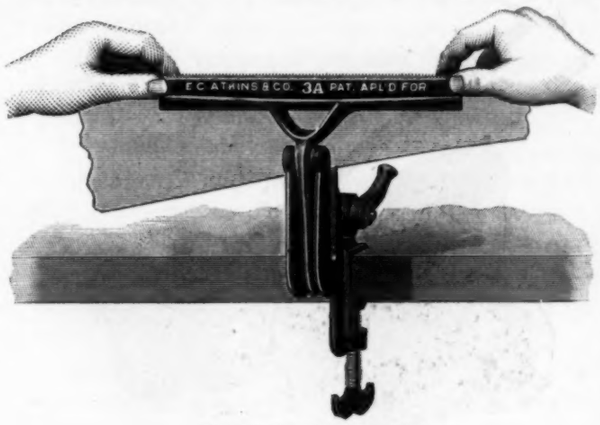
General Appearance of Point Elevation with Brace Support and Ornaments.

Their patent copper-covered Star section lightning rod is made of the finest magnetic steel, grooved for surface capacity and covered water-tight with pure Lake Superior copper. Two lightning conductors are virtually combined in one, forming not only a steel rod, but also a continuous copper connection from the point to the ground. The couplings are made of copper, extra large and strong, securely swedged into the grooves, making the connection continuous of copper. Connections may be easily set on short pieces. The firm's animal vanes are covered with pure gold leaf and made to fit the Star section rods, as are also their scroll arrows. Their catalogue No. 4 will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

D. A. Raiff, M. O. Baker, H. D. Beach and W. R. McCurdy will incorporate a new company to manufacture enameled ware at Coshocton, O.

ATKINS NOISELESS SAW VISE

E. C. Atkins & Co., Inc., Indianapolis, Ind., are manufacturers of Atkins noiseless saw vise shown herewith. All the wearing parts are reinforced. It



Atkins Noiseless Saw Vise.

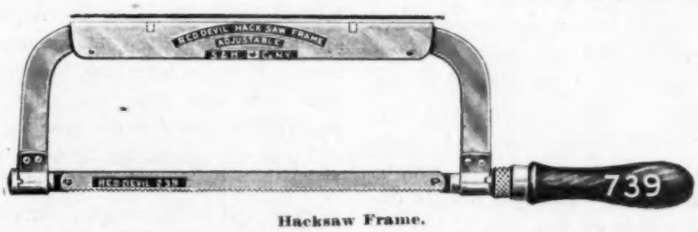
is made of the best material and finely finished, and also has rubber cushions in the jaws to prevent the disagreeable noise. It will make no more noise than if a solid piece of iron is filed.

The vise operates with the lock lever principle, and there is no chance of overstraining it. The jaws are made to open and close by simply pushing same forward and back.

One of the most desirable features is the ease with which the saw can be gauged or adjusted with both hands, so that the teeth will be just the right height above the face of the jaws and the vise instantly tightened without removing the hands. The vise is set so low down on the bench that there is no leverage to cause vibration and in consequence is very rigid.

HACKSAW FRAME.

The Smith & Hemenway Co. of 296 Broadway, New York, are making a new model hackshaw frame,



Hacksaw Frame.

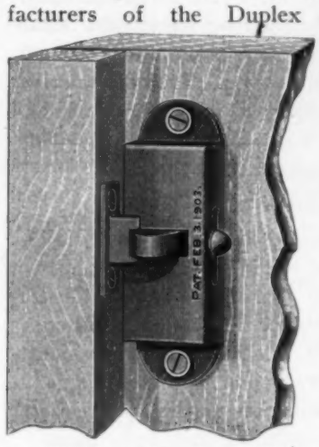
shown in the accompanying cut. This frame has extra heavy back, is absolutely rigid, and is made of the finest steel, with a nickel plated finish. The price is low enough to bring it within reach of all.

ILLINOIS DEALERS FORM A CO-OPERATIVE HARDWARE BUYING ASSOCIATION.

At a meeting held in Centralia, Ill., April 14, there was organized the Southern Illinois Co-Operative Hardware Buying Association, composed of J. S. Bellamy & Co., Sandoval; Hinman & Matthews, Mt. Vernon; Scheurer Bros., Nashville; J. H. Vawter, Salem; O. B. Kurth and H. G. Cormick, Centralia. This is a branch of the Illinois Retail Hardware Dealers' Association and only members thereof will be taken into this buying association. These parties expect to be able to render better service to their patrons in prices and assortment where their supplies are purchased in large quantities for cash.

DUPLEX AUTOMATIC SCREEN DOOR CATCH.

The Duplex Latch Co., Cleveland, O., are manufacturers of the Duplex automatic screen door catch shown in the accompanying illustration. This catch requires no manipulation by hand or foot, as it automatically catches when the door closes, firmly holding it closed until it is released by a slight pull or push. The door can be dead-locked when so desired. There is nothing in the construction of this catch to weaken or give out and it can be applied by any person without difficulty.



The Duplex Automatic Screen Door Catch.

GILT EDGED MIXED PAINT.

Farwell, Ozmun, Kirk & Co., St. Paul, Minn., send us a neat catalogue calling attention to the Gilt Edge mixed paints. The base of this paint is strictly pure carbonate of lead, oxide of zinc, thinned with strictly pure linseed oil and prepared with the strongest tinting colors. It is put up in the following colors: Vermilion, medium buff, Portland stone, Venetian red, leather brown, permanent green, slate, buff, apple yellow, olive green, old gold, olive drab, light buff, brown drab, chocolate, pea green, royal blue, Indian red, terra cotta, dark straw, light salmon, ceiling blue, dark salmon, straw, steel gray, olive gray, neutral tint, lead color, colonial yellow, light brown, warm drab, seal brown, willow green, stone, French gray, sage gray, olive, stone drab, light stone, maroon, light blue, turquoise, pink, light gray, sea green, cream, light lilac, outside white, inside white and jet black.

This firm carry Parian prepared paint, Gilt Edge family paint, Gold Seal varnishes, Gilt Edge wall finish, putty, linseed oil, etc.

HURWOOD TOOLS.

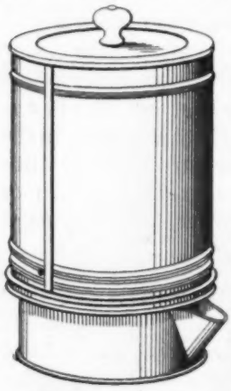
The Acme Mfg. Co., Plantville, Conn., are manufacturers of the Hurwood tools. Their line includes screw drivers, scratch awls, belt awls, folding awls,

thong awls, tinners' awls, handle regulators, screw driver hilts, meat hooks and tie picks. Some of the points of these goods are described by the manufacturers as follows:

"When a hammer is used the full force of the blow falls directly on the work. A special brand of steel used, the quality of which is unsurpassed for strength and toughness. The steel extends from the point of blade through the handle and forms a top for rough use. For those who require strong, serviceable screw drivers nothing can touch the Hurwood. It is impossible to twist the handle on the steel. Each screw driver is warranted for quality of steel and workmanship."

RAPID STEAM COOKER.

The Rotary Steam Cooker Co., Battle Creek, Mich., are manufacturers of the Rapid steam cooker, shown in the accompanying illustrations. The boiler in this cooker will hold from three-quarters gallon to three gallons. It will not run dry, as the water condenses and runs back.

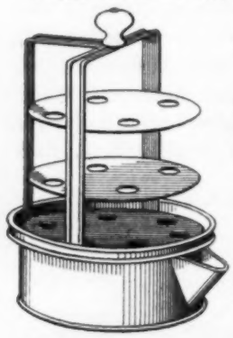


The Cooker Complete.

The No. O cooker is 12 inches high, 9 inches in diameter and has three shelves. The boiler holds three quarts of water.

The Rapid steam cooker is steam tight. The boiler requires infrequent filling only, as the water cannot escape therefrom either in liquid or vapor form.

From three to six separate articles can be cooked in this cooker at the same time over one blaze.



The Cooker with Case Removed.

Mrs. E. E. Kellogg, Battle Creek, Mich., writes the folfollowing testimonial to the merits of this cooker:

"The steam cooker was received and has been given a fair trial. I am pleased to say that I think it is the most convenient steam cooker I have ever used, and I can recommend it to any one who is desirous of purchasing an article of this sort."

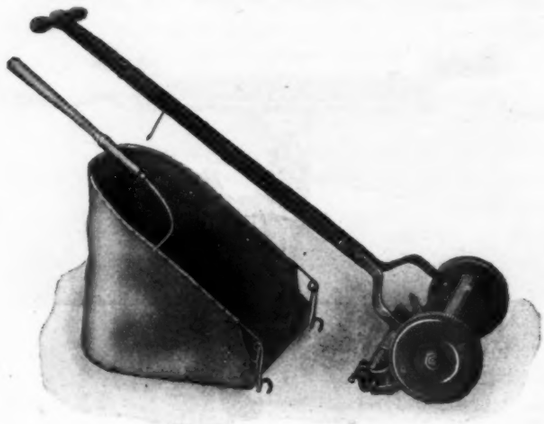
This firm make a special fruit cooker 12 inches in diameter, 24 inches high, with copper boiler and will cook 21 quarts of fruit at once. If the fresh fruit is placed in the cans before cooking, its original form, flavor and color are preserved.

The Cooker with Base Removed.

An illustrated folder describing the cooker will be forwarded dealers on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

THE EASY EMPTYING GRASS CATCHER.

The accompanying cut shows the Easy Emptying Grass Catcher manufactured by the Specialty Mfg. Co., St. Anthony Park, Minn.



The Easy Emptying Grass Catcher.

This catcher fits any lawn mower and is made in two sizes—No. 1 for 12 to 18 inch mowers, and No. 2 for 18 to 22 inch mowers. It is made of heavy duck, with galvanized iron frame.

It is emptied by lifting from mower by handle and emptying the grass into a basket. It can be left off when mowing steep banks or when it is not desirable to catch the grass.

WORKER LEAVES WHOLESALE HOUSE.

H. Conde, assistant advertising manager and catalogue compiler of Hibbard, Spencer, Bartlett & Co., 14-32 Lake street, Chicago, has tendered that firm his resignation, to take effect on May 1. Mr. Conde has been with this concern six years and has been brought up in the hardware business, his father having been engaged therein.

He is an experienced hardware man. For the present it is his intention to devote his full attention to a mail order business in magazines, which he has built up during the past six months to large proportions. It is his intention, however, to identify himself with this new departure only temporarily, and the probabilities are that the near future will see him back again in the special line of work in which he has manifested a special talent. Mr. Conde is an indefatigable worker and is thoroughly conversant with the multifarious details of the hardware business, in which he has been unusually successful.

MINNESOTA INSURANCE.

M. S. Mathews, secretary of the Retail Hardware Dealers' Mutual Fire Insurance Co., of Minnesota, 323 Boston block, Minneapolis, Minn., is sending out some neat blotters showing a picture of Minnehaha Falls, and giving the full data concerning that company. Their receipts from 1902 were $19,708.03; they paid out in losses, $7,752.22, or 39 per cent; returned premiums, 25 per cent, or $4,927.01; paid on cancellations, $189.88, or 1 per cent; their expenses were $2,436.40, or 12 per cent, and $4,402.52 went to the surplus.

Heating and Ventilating

Wm. R. Kinnear, Wm. M. Hood and Raymond R. Kinnear are the incorporators of the Kinnear-Hood Co., Camden, N. J., capitalized at $300,000, for the manufacture of radiators.

The annual banquet of the New England Iron & Hardware Association was held at the Hotel Vendome, Boston, Mass., April 14th, at 6:30 p. m.

C. C. Dodge, H. J. Medberg and C. S. Dodge are the incorporators of the Emergency Valve Co., New York City, incorporated with a capital stock of $100,000.

The council of Elkhart, Ind., have granted to M. C. Wrightson the right to lay pipes for the purpose of heating the residences and stores of the city by a hot water system.

The United States Heater Co., Detroit, Mich., besides increasing their capital stock from $100,000 to $200,000, have increased their board of directors to five, the new directors being Clarence Black and John T. Shaw.

R. W. Newton is president and treasurer, A. B. Chadlek is vice-president and Chas. Trewiller is secretary of the National Steam Specialty Co., Chicago, incorporated under the laws of Illinois with a capitalization of $15,000.

The Sprague & Moore Co. are succeeded by the Woronoco Heating & Plumbing Co., whose officers are as follows: Austin Sackett is president, Wallace Andrews is vice-president, W. B. Quinn is secretary and treasurer, and Austin Sackett, Wallace Andrews, W. D. Quinn, Luke Dunn and Thos. Canavan are the directors.

The American Gage & Valve Mfg. Co., Boston, Mass., and the Mowry & Phillips Co., Boston, Mass., have formed a consolidation under the style of the American Steam Gage Valve Mfg. Co. John McCandish is president, M. Briggs Phillips is vice-president, R. B. Phillips is secretary and J. L. Weeks is treasurer of this concern.

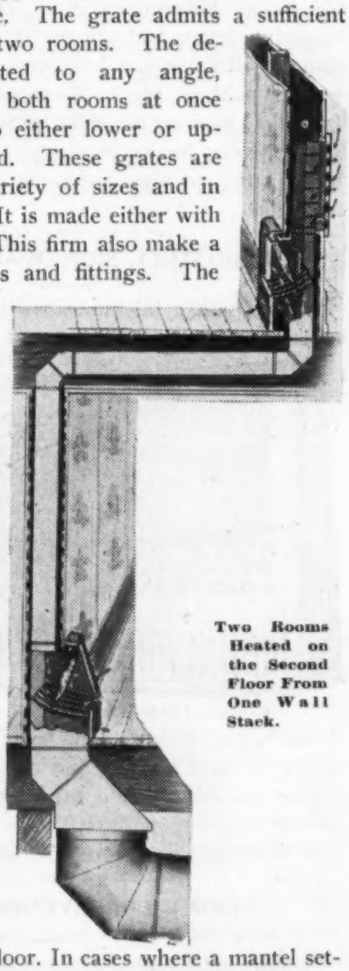
The Hess-Snyder Co., Massillon, O., are offering the trade Snyder's side wall register. Allowance is made in the construction of this register for a stub on the register box long enough to take up variation in thickness of lath and plaster, this stub to be cut off to the required length after the house is finished ready to receive the register. The valve of the register hinges at the top, and by simply raising or lowering a knob in the face of the register the valve is closed or opened.

With register boxes Nos. 3 or 4, using register with border, a hot air pipe 6⅞x12½ inches can be connected to the bottom of the register box, giving 86 inches capacity. With their register boxes Nos. 5 or 6, using two registers with borders opposite each other, a hot air pipe 8¾x12½ inches can be connected to the bottom of the register box, giving 109½ inches capacity. By operating the valve in the register all the heat can be turned into one room or the desired amount into each room.

THE AUER WARM AIR GRATE.

The accompanying cuts show the Auer warm air grate manufactured by the Auer Register Co., Toledo, O. This grate is a most comfortable foot warmer. The currents of air are deflected from the wall and are forced to travel outward across the room. The deflector when closed is an ornamental dust-proof summer front. The Auer warm air grate solves the problem of heating an upper and lower room simultaneously from one pipe. The grate admits a sufficient volume of air for two rooms. The deflector can be adjusted to any angle, throwing heat into both rooms at once or throwing all into either lower or upper room as desired. These grates are made in a great variety of sizes and in all styles of finish. It is made either with or without boxes. This firm also make a line of boots, angles and fittings. The ventilating inlet of the foot piece in the basement forms a direct connection with the outlet in the register box in the rooms for the passage of smoke, coal gas, and odors from the laundry and vegetable cellar, whether the furnace is in use or not. This grate embodies a ventilating principle, as the foul air containing carbonic acid gas is drawn off the floor and out of the room into the space between the studding, through the grille work near the floor. In cases where a mantel setting is desired this firm can supply same in two sizes to fit the regulation mantel openings, 30x24 and 30x30 for receiving grates Nos. 115 and 116, giving the mantel a finished appearance and providing adequate means for warming the room from the furnace. For heating two rooms on one floor the Auer warm air grate is placed on the floor of the larger room and a smaller size is attached to the extension collar opening into the opposite room. This allows the shifting of the entire volume or any portion of the heat to either room.

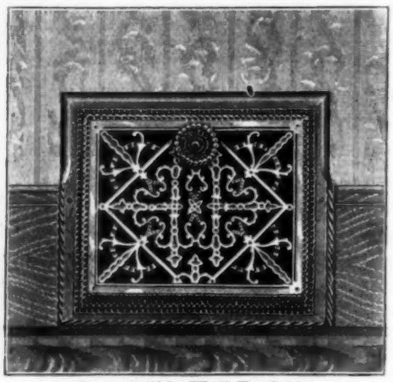
The Auer Warm Air Grate.



Two Rooms Heated on the Second Floor From One Wall Stack.

STOWELL SIDE WALL REGISTER.

The accompanying cut shows the Stowell side wall register manufactured by the Stowell Mfg. & Foundry

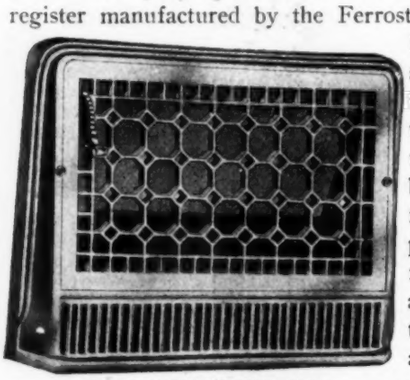


Stowell Side Wall Register.

Co., South Milwaukee, Wis. These registers have a beautiful design and are perfectly ventilated and are made in all finishes and all sizes. They are furnished with or without pipe. Their advantages include the facts that they are air tight, produce no discoloration, are noiseless, have very large air capacity, ventilate both floors, do away with cutting of carpets, floors and dust.

FERROSTEEL SIDE WALL REGISTER.

The accompanying cut shows the Ferrosteel side wall register manufactured by the Ferrosteel Co., Cleveland, O. A strong feature in its favor is that it can be used in baseboards, shallow flues or thin partitions. This register is set as follows: The two side screws are removed and the border frame is placed over the tin box. The projecting edges of the tin box are then cut off even with the border frame, the edges being turned over. This holds the border frame in position. The face is then replaced and is secured as before with side screws.



Ferrosteel Side Wall Register.

LIGHT FOR EVENING HOURS.

"Light for Evening Hours" is the title of a booklet sent us by the Detroit Heating & Lighting Co., Detroit, Mich., which describes their system of lighting houses in which the carbureter is made of heavy galvanized sheet steel and divided horizontally into shallow cells, numbering from two to four or more, depending upon the capacity of the machine. These cells are only partially filled with gasolene; that is, they are filled to their working capacity, because over the surface of the gasolene the air is made to pass and pick up in its travel the particles of vapor. Partitions of absorbent material are so placed in each cell as to form a narrow coil-shaped passage; if they were straightened out they would appear like a long, narrow hall.

These passages serve two purposes: First, they mark out a line of travel for the air; this is absolutely necessary, for the air will always take the shortest cut to the exit, if it is not restrained. Second, the other purpose of the coil-shaped passage is to increase evaporating surface.

One of these interesting booklets will be sent to the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

WILL MEET AT WASHINGTON, D. C.

The fifteenth annual convention of the National Association of Master Steam and Hot Water Fitters will be held at the Arlington Hotel, Washington, D. C., May 21, 22 and 23, and should be largely attended by members of the association.

Henry B. Gombers, the national secretary, in his call says: "It is quite certain that matters of the greatest importance, affecting the relations between the manufacturers and jobbers of steam heating material and the members of this association, will be presented for consideration.

"The present trade resolutions and future trade agreements will be freely discussed, and it is of the utmost importance that members should be prepared to give the convention the benefit of their views upon the above subjects which of necessity affect their business interests.

"A form of uniform contract, which will be satisfactory to heating engineers on the one side and the Master Steam and Hot Water Fitters' Association on the other side, is something to be desired. It is quite likely that a proposition will be presented tending toward the preparation and adoption of such a form.

"Enlarging the scope and influence of this association by means of special work to be performed by an assistant secretary has been suggested as a subject that should be taken up by the members in convention assembled.

"Members should make every effort to be present at executive sessions in order to thoroughly understand the subjects to be discussed, as it is very evident that it is difficult to convey or repeat the full sense of many important matters that transpire during the executive sessions.

"The details concerning rates at hotel and methods of engaging accommodations will be sent to members as soon as possible.

"Railroad rates will probably be satisfactory, as application has been made to proper official, and due notice will be given of same in May issue of the 'Official Bulletin,' as well as in the trade papers.

"Send your credential certificate to national headquarters as soon as possible, so that we can gauge the probable attendance and thus be enabled to make necessary arrangements.

"No proxies will be accepted at convention for the reason that the constitution provides for the personal attendance of members, thus giving every member in good standing the individual right to be heard as well as to vote.

"You are again reminded that all proposed changes in the constitution and by-laws must be submitted to the national board of directors at least ten days before the date of convention, in order that proposed changes can be considered and reported to convention."

Manufacturers and jobbers are invited to attend this meeting.

CATALOGUE B.

The Patric Furnace Co., 15 West Washington street, Springfield, O., send us a copy of their catalogue B. A feature of this firm's furnaces is found in the fire bowl, which is cast on a chute, and with another casting matching it in form are driven in place into a steel band and bolted to the main fire bowl, forming a soft coal coking and smoke burning device.

The double cylinder radiator in their improved Hustler pattern consists of two concentric cylinders, the smaller cylinder or drum being suspended within the larger one, forming an annular combustion chamber, with the flame and hot gases confined between the two surfaces.

Each drum is an auxiliary to the other in holding the heat where it will do the most good.

In the radiator the heads are provided with double flanges, between which the steel shell is received. The space between these flanges is filled with black asbestos furnace cement, a fireproof material which becomes almost as hard as adamant. The steel shell is forced into this bed of cement with a flange on each side, the upper and lower heads then being drawn toward each other by means of rods on the outside of the shell. This makes a very durable and tight joint, and one that is not injured by the unequal expansion and contraction of steel and cast iron.

The joints between the ash box and fire bowl and radiator are also of a nature to give satisfaction. The fire bowl rests upon a flat surface of the ash box and over a flange forming a wedge-shaped opening on the inside. This opening is filled with white asbestos cement and will keep constantly filled with ashes and cinders, which cannot be blown out because the pressure and filling are on the same side of the joint, and it would only serve to drive it tighter.

The top of the fire bowl is provided with a double-flanged cup-shaped rim, into which the lower rim of the radiator base rests.

This cup-shaped joint is filled with asbestos cement.

One of these catalogues will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

ROYAL HEATERS.

The Hart & Crouse Co., Utica, N. Y., send us their latest catalogue of Royal hot air furnaces. A feature of these furnaces is found in the patent triangular grate which has cast hollow bars with openings from each surface, admitting the draft as it passes through the fire, to circulate first through the grate bars, preserving the same, and insuring them against warping. The royal and Prince Royal furnaces are high-grade and powerful. The Victor is an excellent medium-priced and their Imperial is a low-priced furnace.

The Royal hot air furnace portable form is furnished with ash pit shovel, duplex clinker cleaning grate, dust flue, lined doors, bronze hinge pins and steel radiators, absolutely gas tight.

The Prince Royal combination hot water and hot air heater is especially designed to heat rooms with hot water that are difficult to reach with warm air pipes, and where it is desirable to have an apparatus that will furnish a perfect system of heating and ventilating, supplying both direct and indirect heat. A cast iron boiler of three sections is suspended directly over the fire. The water enters the lower section, passing through that to the next section, and then to the upper section, and out through the flow pipe to the radiators. These sections are connected together with wrought iron nipples, and the circulation of water through them is positive and rapid. Each section is exposed to the direct rays of the fire, and the construction of the boiler is such that it does not interfere with the combustion of the fuel or the radiating power of the furnace. Its combined power and ease of management, together with the fact that the same fire which produces the warm air also furnishes the hot water without an extra consumption of fuel, makes it a most desirable and economical heater. It is made in four sizes, No. 43, 47, 53 and 63, and is suited to all classes of buildings.

This firm have added New York radiators to their line. These radiators have many desirable features, as they have the large surface on the outside and the small surface on the inside, thereby insuring a free and easy motion of the air and obtaining the best results for heating. The rod is also countersunk in order to prevent unsightly bolts. Each section is 9 inches wide. The width of the legs is 9¾ inches. These radiators are connected with extra heavy slip nipples.

One of these catalogues will be forwarded to the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

MUELLER BOILERS FOR STEAM AND WATER.

The L. J. Mueller Furnace Co., 191 Reed street, Milwaukee, Wis., send us an attractive catalogue showing their line of Mueller boilers for steam and water.

These boilers are constructed throughout of the best grade of cast iron, perfect in workmanship and attractive in design.

In the fire pot, which is of unusual depth, the large center column is connected by radial arms with the sides to secure perfect circulation within the boiler itself. The center column and radial arms, containing a considerable quantity of water, overhang the fire in a most effective manner. The value of overhanging surface is best demonstrated by the excellent results secured, even when only a low fire is maintained. The inner surface of the fire pot is constructed with deep corrugations, thus presenting fully one-third more fire surface (backed by water) to the direct radiant heat of the fire than if constructed without these corrugations, it is claimed. By means of these corrugations free circulation of air is also insured at the edge of the fire.

The sections are connected by means of lathe-turned screw nipples. The smaller of the sections is without flue openings, so that the gases in their travel to the smoke flue are obliged to impinge against the entire lower surface and travel completely around the outer edge of section. This makes additional fire surface.

The larger of the sections is provided with flue openings of sufficient area to allow a free circulation of the gases and to avoid any clogging of soot.

The center connection is by means of threaded nipples. These nipples are of ample diameter to secure free circulation within the boiler, and inasmuch as in this form of construction expansion is from the center outward, there is experienced obsolutely no difficulty with broken sections, while the nipple secures a tight and lasting joint.

Ample space is provided for steam.

Arrangements are made in these boilers for the introduction of a coil of pipe in the fire. This coil of pipe is designed to heat water for domestic purposes, and is an economical device for supplying necessary hot water during the season when the heating apparatus is in use. These boilers are provided with a rocking and dumping grate, which is simple and effective. The grate ring has been entirely eliminated, and the base itself becomes the holder or support for the grate bars.

One of these catalogues will be forwarded to the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

THOMPSON TUBULAR FURNACE.

The Springfield Furnace Co., Springfield, O., manufacturers of the Thompson tubular furnaces for house heating, send us one of their interesting catalogues. The casing of the Thompson tubular coal furnace is made of galvanized iron built on a frame of angle iron. The inside of the casing where exposed to much heat is protected by cold air flues.

The top of the casing is flat, which makes it very convenient for arranging the hot air pipes and makes the work of inserting the collars simple. This flat top is supported by angle iron braces, so that it will bear any weight of pipe without sagging. The height of these furnaces complete is from 51 to 54 inches, according to size, so they can be set in any cellar in which a man can stand erect. A peculiar feature of the casing is that the front and back casing sheet can be removed without disturbing the top, so that every part of the furnace can be got at for examination, cleaning or repair. A competent man with helper can set up one of these furnaces complete, ready for putting in the collars for the hot air pipes in from two to three hours.

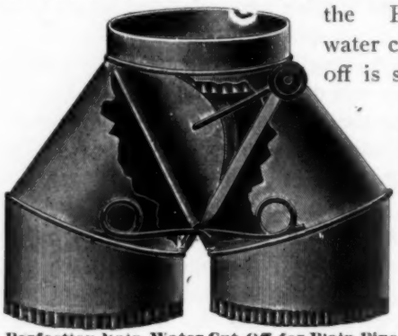
The fire box is connected with the ash pit below and the combustion chamber above by true expansion joints so that it can expand or contract as much as it pleases without affecting the other parts. The fire box has deeply corrugated sides, which hold the coal away from the sides and allow a current of air between the coal and the fire box. This prevents the overheating of the fire box, saves it from burning out and decreases the danger of cracking. The grates are not fixed in the furnace so that the furnace has to be taken down to get them out. They are in the ash pit and slide in on tracks like drawers in a case. They are interchangeable. Any person can slide a grate out if it becomes damaged and slide in a new one.

The separator, which is made of the best refined sheet iron, is not likely to get red hot, or if it did become so heated it would be at such rare intervals and for such a short time that no injury would result. It is coated within and without with aluminum to protect it from the dampness of the cellar.

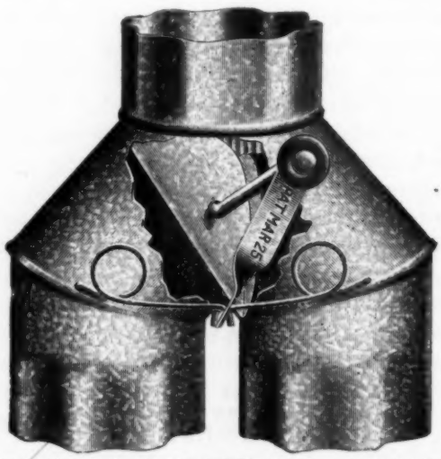
The Thompson tubular gas furnace is made in eight sizes varying from 40 to 54 inches in height. One of these up-to-date and well written, printed and illustrated catalogues will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

PERFECTION RAIN WATER CUT-OFF.

The Klauer Mfg. Co., Dubuque, Ia., are successors to W. A. Smith & Co., Lima, O., as manufacturers of the Perfection rain water cut-off. This cut-off is shown herewith applied to both plain and corrugated pipe. It is claimed that this cut-off excels all others in simplicity, strength and durability. It is recommended by architects and builders everywhere and is made in the following sizes: 2 inches tin, 2½ inches tin, 3 inches tin, 3½ inches tin, 4 inches tin, 5 inches tin, 6 inches tin, 2 inches galvanized, 3 inches galvanized, 4 inches galvanized, 5 inches galvanized and six inches galvanized. This firm make a complete line of corrugated and plain round expanding elbows and shoes, conductor hooks, corrugated square expanding conductor pipe, single bead eaves trough, lap and slip joint, double bead eaves trough, Imperial steel eaves trough hangers, roof gutters, galvanized iron ridgings, corrugated sheets, rock face stone, cornices, window and door caps, metal ceilings, etc.



Perfection Rain Water Cut-Off for Plain Pipe



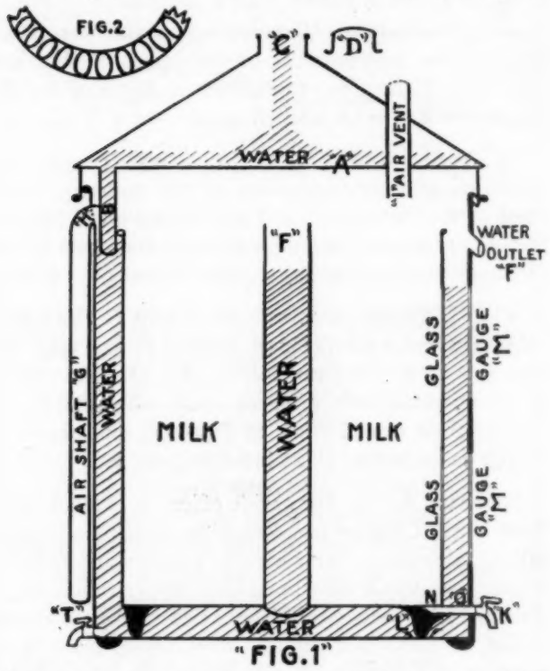
Perfection Rain Water Cut-Off for Corrugated Pipe.

Tinshop.

CREAM SEPARATORS.

BY L. S. BONBRAKE.

The construction of a practical and reliable cream separator, one in which the water and milk are kept separate, and so constructed that the milk is surrounded by water, also having water pass through the center of the milk, and that may be detached and easily and



"FIG.1"

thoroughly cleaned in all its parts, has received but little attention from the trade at large, they apparently preferring to take that which is offered than bother about a plan for one which could be made in their own shop.

The growing demand for this class of goods is evident and pronounced, hence we will endeavor in this article to describe and illustrate our conception of a practical separator covering all of the above features and easily made, several of which have been made by the writer and used with satisfactory results.

THE COMPLETE DEVELOPMENT

of the can is illustrated by Fig. 1, drawn to a scale of one-fourth inch to the inch, the inside milk receptacle of which should be made of not lighter than IX bright tin plate, and the outer or water compartment may be made of galvanized iron.

The cover may be made of tin or galvanized iron, and if water on the top is not desired the bottom "A" of the cover may be omitted and the water tube "B" of same extended through the top of the cover and a funnel used for filling the water compartments. The cover, as shown, is intended to be used for flowing water, which enters same at "C" when the cap "D" is removed, filling the cover up to the top of the tube "B," emptying same into the can until all the water compartments are full up to the bottom of the outlet "E," which should be twice the size of the inlet tube "B," thus preventing overflow of water into the milk can.

THE CENTER TUBE

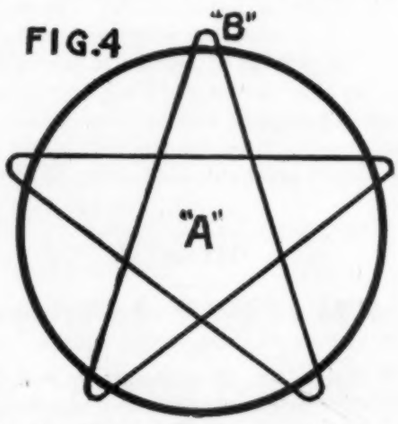
"F" may be omitted if so desired, and the milk can made entirely plain as suits the fancy of the maker, being easier to construct and fully as efficient when living water is used. However, in case of filling the can by hand, its use is advised from the fact that it has been demonstrated as advisable to have as much cold surface come in contact with the milk as possible for good results. The inner or milk can is provided with feet at its bottom for raising same from the bottom of the outer can, as shown. This result may be obtained by means of a perforated hoop or band (Fig. 2), which will be somewhat stronger.

An air shaft "G" should extend from near the bottom of the outer can to near its top, where the shaft is connected at the opening "H," the hole being covered with brass wire cloth, as is the same with the air vent "I." The object of the tubes "G" and "I" is to provide ventilation; the circulation of air thus formed will carry off all animal heat and odor.

A WATER FAUCET

is soldered into the bottom of the outer can at "J," which will drain the can when so desired, and the tapered faucet "K" should be provided with a thread cut on the outside to fit a nut in the outer can, and having the thread at its smaller end to fit a nut soldered into the milk can for the purpose of drawing the milk from under the cream. If desired the water may be poured out after the milk can has been emptied. A lug "L" or guide of some character is provided for holding the inner can in proper position for receiving the milk faucet, and care must be taken to solder the nuts into both cans, so that when both are tight on the faucet the end of the latter will point down.

The glass gauges in can may be bought, or one equally as efficient may be made in the shop by using heavy mica, which is cemented into a frame and the frames soldered onto the cans directly opposite to each other; as the purpose of the gauges is to show the



accumulated cream and not for a measure, they may be used of one size for the several sizes of cans in demand.

OPERATION.

In operation the inside or milk can is placed in position and the faucet "K" turned up tight in both nuts "N" and "O." The milk is then poured into the milk can, after which the water is applied. If water is poured in at the tube "B," it should be changed two or three times on very warm days for good results.

When all the cream has been accumulated on top contained in the milk the milk may be drawn out, the cream cared for and after the water has run off the faucet "K" may be unloosened and the milk can lifted out for cleaning.

It is simple in construction without a doubt and is practical and reliable, with the advantage of being as easy to repair as a lard can.

NOTES AND QUERIES.

GLASS CANDLESTICKS.

From "D. M. C.," Cincinnati, O.

Who makes glass candlesticks?

Ans.—Gillinder & Son, 135 Oxford street, Philadelphia, Pa.; S. McKee & Co., Pittsburg, Pa; Mt. Washington Glass Co., New Bedford, Conn.; Riverside Glass Works, Wellsburg, W. Va.

EAVE TROUGH END FORMER.

From Elmer Kempf, Cleveland, O.

Would like address of manufacturer of an eave trough end former?

Ans.—G. E. Bishop, Dowagiac, Mich.

PLUMBERS' TRADE JOURNAL.

From P. T. Scruggs, Live Oak, Fla.

Where is the Plumbers' Trade Journal published?

Ans. New York City.

SOLDER FOR ALUMINUM.

From E. A. Kilmer, Sayre, Pa.

Would like a good solder for aluminum?

Ans.—The composition of leading solders for aluminum is as follows: Zinc, 80 parts; copper, 8 parts; aluminum, 12 parts; zinc, 85 parts; copper, 6 parts; aluminum, 9 parts; zinc, 88 parts; copper, 5 parts; aluminum, 7 parts; zinc, 90 parts; copper, 4 parts; aluminum, 6 parts; zinc, 94 parts; copper, 2 parts; aluminum, 4 parts. The solders are made by first preparing an aluminum copper alloy and mixing this with the required quantity of zinc. The copper is first melted and the aluminum, divided into three or four portions, is gradually introduced into the melted copper, a perfect mixture being effected by stirring. When the last portion of aluminum has been added, throw in the zinc, and at the same time some fat or resin, then stir quickly and briskly, immediately remove the crucible from the fire and pour the alloy into iron moulds previously rubbed with coal tar oil or benzine.

ITEMS.

It is said that valuable tin mines have been opened up in the vicinity of Cape Nome, Alaska.

The Shamokin, Pa., tinsmiths are on a strike for a 10 per cent increase in wages and a nine-hour day.

It is said that the American Can Co. will remove their plant from Conneaut, Ohio, to Cleveland, Ohio.

There was a strike of the Mt. Vernon, N. Y., union tinners on April 9th. They struck in sympathy with the plumbers and steamfitters.

A. W. Matthew, B. Grunthal and Philip Friend are the incorporators of the Harlem Cornice & Roofing Co., New York City, capitalized at $100,000.

Louis Marchesini, Gaeteno Marchesini and Joseph Devoto are the incorporators of the Independent Tin Can Co., New York, N. Y., capitalized at $20,000.

President Shaffer of the Amalgamated Association of Iron, Steel and Tinplate Workers, in an address at Ashland, Ky., April 12, declared that he was not a believer in the necessity of strikes.

Edwin A. Smith, who is a thoroughly experienced sheet metal worker, has started a tin and furnace business at Winterset, Ia. He will make a specialty of furnace work, hot water heating and steam fitting.

James Y. Watkins, Walter Watkins and Wm. Watkins are the incorporators of the James Y. Watkins Co., New York City, capitalized at $25,000, for the manufacture of hotel kitchen ware.

On April 4th, D. H. Williams, who recently resigned as mill superintendent at the Anderson, Ind., plant of the American Tin Plate Co., to go to Sharon, Pa., was presented with a gold watch and chain by the employes of that plant as an expression of their esteem.

Wm. S. Benson is president, Harry B. Martin is vice-president, and Peter J. Quinn is secretary and treasurer of the Hudson Rolling Mill Co., Bloomfield, N. J., manufacturers of sheet metal, who recently increased their capital stock to $150,000, and expect to shortly manufacture sheet brass, copper, etc.

Merchant & Co., Inc., with offices in Philadelphia, New York, Chicago and Brooklyn, send us a circular calling attention to their cornice braziers and polished copper seamless drawn brass and copper tubing in all standard and odd sizes, iron size, seamless drawn tubing in brass and copper, sheet brass, brass wire, German silver resistance wire, brass rods, copper rods, pump cylinders, pure lake copper in commutator bars, rectangular and odd shapes and spring brush copper.

The Welling & Bowers Mfg. Company of Lima, O., has been formed to succeed the business of the Welling Mfg. Company of Columbus, with officers, G. A. Welling president; A. E. Bowers, vice-president; F. M. Bowers, treasurer, and Loid Bowers, secretary. G. A. Welling is well known in Columbus, and F. M. Bowers, was formerly of the firm of Rhodes-Dickleman Company, Forest, O. They have secured three acres of land at Lima, O., and are constructing substantial buildings with a floor capacity of 15,000 square feet.

$13.50 TO ST. PAUL AND BACK

April 21 and 28 via Chicago, Milwaukee & St. Paul railway. Tickets good to return for 21 days. Leave Union station, Chicago, 9 a. m., 6:30 p. m. or 10:30 p. m. Tickets, 95 Adams street.

Walls & Kindschuh are a new firm of Rockford, Wash., hardware dealers, who will handle a complete line of shelf and heavy hardware, tinware, etc. They would be pleased to receive catalogues and prices from jobbers and manufacturers. R. F. Walls and J. J. Kindschuh, the members of this firm, are both experienced hardware men.

Advertising Department.

Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.

Geo. L. Rose, Fishhook, Ill., is doing a line of advertising that should bring him in a goodly amount of farmers' patronage. His advertisement is well displayed, but contains too many styles of type. Mr. Rose advises us that this announcement of his has proven quite a trade puller, which is the main thing

New Departure.
I have decided for the benefit of the public to take in exchange for any article to be found in my store
POULTRY, EGGS, BUTTER
The following is some of the FIRST-CLASS GOODS that I offer for exchange: : : : : :
A full line of Hardware,
Garland Cook Stoves and Heaters,
Quick Meal Gasoline Stoves,
Majestic Ranges and Wilson Heaters,
Lisk's patent Anti-Rusting Tinware,
Wadsworth Howland's Mixed Paint.
IS NOT THIS AN OPENING FOR THE HOUSEWIFE
to equip herself with a good line of Tinware and other numerous articles which you have been in need of for so long a time? ? ? ? ? ? ?
JUST CATCH A FEW CHICKENS
and gather up the Eggs and bring a little of that butter along in the morning and take a new Wash boiler, Tea Kettle or a Majestic Range home with you.
☞WHO WILL BE FIRST to take advantage of this opportunity? ? ? ? ? ? ? ?
Geo. L. Rose,
FISH HOOK, ILL.

after all. However, we believe that it is the cardinal idea of the announcement that is the drawing card and that the accompanying advertisement could be made tremendously more effective. It is just the style of an advertisement to illustrate with a nice cut, showing a farmer's wife exchanging eggs and chickens for a steel range.

The announcement is loosely written. Why not head it with a cut of a woman chasing a chicken and under it put the lines *"Catch a Chicken* and take it to *Rose's* with some butter and eggs and receive in return any article found in my store, which include (here insert a line of attractive goods carried"). Follow this up with a signature and a far better announcement could be made in two-thirds of the space.

O. J. Wilcox, Ludington, Mich., evidently has a hardware store in the fourth ward. This display in the accompanying advertisement is not bad, but a good line across the top of the space with the wording "Fourth Ward Hardware Store" would have proven as beneficial as it now appears, and the space now occupied by these words could have been utilized in stating some of the vital points regarding his stoves and ranges, or giving a proposition on bobs and sleighs, which he has failed to do. The typographical arrangement is good, and the type faces are comparatively new.

The Fourth Ward Hardware Store
WE SELL THE
Celebrated Belknap Bobs and Sleighs
The best on the market.
Also a full line of
Stoves and Ranges, Tinware, Nickel Ware, Doors, Windows, Paints, Oils.
O. J. WILCOX

The consistency of the advertisement of the B. J. Goodsell Hardware Co., Ludington, Mich., is not very clear, as swimming and sleighing are slightly out of corresponding seasons. The illustration we consider decidedly bad to advertise cutters. This advertisement appears in the Ludington Chronicle of Feb. 11th, which is rather late to advertise this line of goods without a special proposition of some sort, such as advertising $35 cutters for $25, giving some inducement to the public in purchasing a cutter so late in the season. The typographical arrangement would have been improved by setting "You should get one of those" in small type, giving more white space and causing the principal features of the announcement to stand out more prominently.

To be in the Swim--
YOU OUGHTTO GET ONE OF THOSE
SWELL CUTTERS
FOR SALE BY
B. J. Goodsell Hardware Co.
WE HAVE EVERYTHING ON RUNNERS.

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ELECTRO-GALVANIZING.

Dr. Carl Richter, in the "Elektrochemische Zeitschrift," discusses at great length the electro-galvanizing industry, and the methods which, in his opinion, ought to be employed in testing articles of galvanized iron. Dr. Richter, we believe, is interested in the introduction of electro-galvanizing methods into Germany and Austria, and he believes that the comparative slow progress of this industry is partly due to the absence of reliable and accurate methods for testing the physical and chemical properties of the coating produced. The following are the properties for which Dr. Richter considers tests are required:

1. Geometrical and Optical Properties.—Form, color, lustre.

2. Mechanical Properties.—Hardness, continuity, elasticity, tensile strength, adhesiveness.

3. Chemical and Electro-chemical Properties.—Constitution, resistance to corrosion, protective power.

4. Thermal Properties.—Shrinkage and expansion on application of cold and heat.

5. Properties of the Base-metal.—Any alteration in these after coating with zinc should be noted.

The methods of laboratory examination for obtaining comparative results in relation to the above properties are fully discussed, and the author suggests, in closing his lengthy article, that the next step is the application of these methods to the practical requirements of the electro-galvanizing industry. It is perhaps not generally known that the property given in Richter's table under III. c—viz., "protective power"—is the origin of the term galvanized iron. Zinc and iron form a galvanic couple when exposed to damp air; and even when the zinc coating has been pierced, so long as the superficial area of the exposed iron is not too great, the surrounding layer of zinc protects the iron from oxidation or rusting. The area protected increases with the thickness of the zinc deposit. The hot or dipping method of producing "galvanized" iron (dipping the sheets after special cleaning in molten zinc) is still employed for the greater portion of the output of galvanized sheet iron, and the use of the electrolytic method is confined to a limited group of articles for which it is specially adapted. While admitting that the slow growth of the electro-galvanizing industry may be partly due to the causes which Dr. Richter has suggested in his articles, we are inclined to believe that the chief retarding influence has been the fact that the electrolytic process is more troublesome and more expensive than the older "dipping" process. It may be considered open to question whether the improved physical properties of the coating produced compensate fully for this extra trouble and expense, and we shall therefore await Dr. Richter's promised further contributions on this subject with interest. —Electrical Review.

THE TYPE PHOUNDERS PHAULT.

We begin the publication ov the Roccay Mountain Cyclone with some phew diphphiculties in the way. The type-phounders phrom whom we bought our outphit phor this printing ophphice phaled to supply us with any ehs or cays, and it will be phour or phive weex bephore we can get any. The mistaque was not phound out till a day or two ago. We have ordered the missing letters, and will have to get along without them till they come. We don't lique the loox ov this variety ov spelling any better than our readers, but mistax will happen in the best regulated phamilies, and iph the ph's and c's and x's and q's hold out we shall ceep (sound the c hard) the Cyclone whirling aphter a phasion till the sorts arrive. It is no joque to us—it's a serious aphphair.—Exchange.

Trade Report.

CHICAGO IRON MARKET.

Any effort to give reasons for the recent changes in the market for Southern iron may be construed at first sight to be apparently an attempt to bolster up a weak condition, since the changes referred to were in the direction of a decline. This is not necessarily so.

The opinion has been advanced by some Southern furnace companies that prices are too high, anyway, and ought to be reduced to meet problems, such as the encroachment of foreign material, curtailment of manufacturing and building operations, etc.

Sellers are naturally of the same opinion.

The rules and customs, however, covering the other trades, apply as well to the pig iron business; and while such opinions may be received with due respect, it will be entirely safe to depend upon the law of supply and demand to furnish a satisfactory solution.

The varying ideas of the furnace participating if or following this decline render it impossible to advance any opinion that will present a consistent view of the general situation.

The local situation, both as to Lake Superior coke and charcoal irons, remains practically unchanged.

It must be admitted that buyers seem to be fully supplied up to July 1.

Inquiry for later deliveries is light.

The supply for the last half is not expected to be in excess of consumption.

Furnaces are resting easy.

RAILS AND TRACK SUPPLIES.

Orders continue to be accepted by mills from steam and electrical roads for both heavy and light sections, and the tonnage closed during the week aggregates several thousand tons. It is worthy of special mention that a Western road sought to place an order last week for heavy rails for delivery next spring, but the mills refused to accept it.

Eastern mills have booked orders in the past week for about 10,000 tons of standard sections for late delivery. A large producer which has been offering rails for this year's delivery in this market reports that its capacity is now all taken and that it will withdraw from the market. We quote standard sections, 500 tons and over, $28; less than 500 tons to carload lots, $30; less than carload lots, $32; light rails, 45 pounds, $34 to $35; 12 pounds, $39 to $40, with regular differentials for intermediate sizes. Track supplies, mill shipments: Angle bars, 2c to 2.10c; spikes, first quality, 2.25c (out of store, carload lots, 2.35c to 2.45c rates); second quality, 2.10c; track bolts, 3½x¾, with square nuts, 2.85c to 3c per 100 pounds; with hexagon nuts, 3.05 to 3.15c, with usual differentials for other sizes.

BARS.

Heavy demand for bars during the past week. There is a good inquiry from the implement trade, which is asking quotations on yearly requirements, and now that steel makers have reaffirmed the present prices for the coming year, it is expected that orders will be placed more freely than in the past few weeks, though as many consumers have still three months to run on last year's contracts, a decided buying movement is not looked for. Consumers of bar iron have been governed largely by individual considerations in placing contracts, and sales of this product are influenced from week to week by these facts. At the present time the market is quiet. We quote mill shipments, Chicago delivery, as follows: Bessemer steel, 1.76½c; angles, less than 3x3, 1.86½c base; hoops in lots of 250 tons and greater, 2.06½c; less than this amount, 2.16½c; iron, 1.80c to 1.90c. Prices from store are as follows: Steel, 2c to 2.10c; iron, 2.15c to 2.20c; hoops, 2.40c to 2.50c; angles, 2.25c rates.

The requirements of the coming season of the implement trade have caused several large contracts to be placed and many pending. We quote mill shipments, Chicago delivery, as follows: Spring steel, 2.65c to 2.75c; sleigh shoe, 1.95c flat sizes; concave and convex, 2c; out of store, 2.15c; cutter shoe, 2.50c to 2.60c; machinery steel, 2.15c to 2.25c base; plow steel, 2.50c and upward, according to quality; toe calk, 2.30c to 2.40c; out of stock, 3c to 3.10c; ordinary tool steel, 6c to 7c; specials, 13c and upward; less than carload lots, 5 to 10 per cent higher; cold rolled shafting, carload lots, 47 per cent off; less than carload lots, 42 per cent off.

STRUCTURAL STEEL.

The market is generally quiet, but few sales being reported. The Lewis Institute of this city is taking figures on an addition to its buildings, and it is reported that several hundred tons of shapes for it will be bought from local jobbers, owing to the inability of mills to give the necessary delivery. We quote mill prices, Chicago delivery: Beams and channels, 16 inches and under, 1.75c to 2c; 18 inches and over, 1.85c to 2.10c; universal plates, 1.90c to 2.10c; angles, 3x3 and larger, 1.75c to 2c; tees, 3x3 and larger, 1.80c to 1.90c; zees, 1.75c to 1.95c. The maximum quotations are asked by some mills and dealers on lots for quick shipment. Lots from store, 2¼c to 2½c per pound.

BILLETS.

Local interests report the sale of 10,000 tons of foreign Slabs and Sheet Bars at $32, delivered Philadelphia, duty paid, but this steel will remain in the East. The local market remains dull and prices are entirely nominal. It is reported that no Germans are available for shipment to this country before September, but quotations are made on the basis of $28.50, delivered at Philadelphia, and nominally $31.50 to $32, delivered Chicago. There are no domestic Bessemer

billets available, and open hearth forging billets are sold only in a jobbing way at $23 to $38, according to analysis, buyer and time of delivery.

MERCHANT STEEL.

A small amount of buying has been transacted in the past week, though inquiries for yearly needs commencing July 1, coming from implement manufacturers, grow more numerous. We quote mill shipments, Chicago delivery, as follows: Spring steel, 2.65c to 2.75c; sleigh shoe, 1.95c flat sizes; concave and convex, 2c; out of store, 2.15c; cutter shoe, 2.50c to 2.60c; machinery steel, 2.15c to 2.25c base; plow steel, 2.50c and upward, according to quality; toe calk, 2.30c to 2.40c; out of stock, 3c to 3.10c; ordinary tool steel, 6c to 7c; specials, 13c and upward; less than carload lots, 5 to 10 per cent higher; cold rolled shafting, carload lots, 47 per cent off; less than carload lots, 42 per cent off.

PLATES.

The market for plates has been brisk. We quote mill prices, Chicago delivery: Tank steel, ¼-inch and heavier, 1.90c to 2c; flange steel, 2c to 2.10c. The official base price of 1.75c remains unchanged, though material cannot be bought at this quotation in this market. Prices for lots from stock: Tank steel, ¼-inch and heavier, 2.15c to 2.25c; 3-16, 2.25c to 2.35c; No. 8, 2.30c to 2.40c; No. 10, 2.35c to 2.45c; flange steel, 2.40c to 2.50c.

COPPER TACKS.

Copper tacks are quoted at 27c per pound.

COPPER KETTLES.

Copper kettles are quoted at 27½c per pound.

GLASS.

It is now estimated that there will not be more than 150 window glass pots in operation after April 18, as several factories which had not decided upon their future course of action have, it is understood, agreed to close on that date. This gives a firmer tone to the market, and fewer reports of prospective price cutting are in circulation. Quotations of the jobbers' association, for either single or double strength, are as follows: From store, 90 and 10 per cent discount; f. o. b. factory, carload lots, 90 and 2c and 2½ per cent discount; f. o. b. factory, 2,000-box lots, 90 and 25 per cent discount.

OILS.

The demand for linseed oil in small lots has fallen off to a perceptible degree during the week. Large consumers are depending almost entirely upon their contracts to cover their requirements. While there has been no change in official quotations, the market is weak, owing to the declining tendency of the seed market. Quotations, according to quantity, are as follows: City raw, 46c to 47c; out of town raw, 43c per gallon.

TIN.

Tin is quiet but fairly steady. Yesterday's New York closing was 29.80@29.90c for spot to June for round lots. Jobbing price is steady at 31@32c; London was last cabled easy at £135 7s 6d for spot and £135 10s for futures.

TIN PLATES.

Tin plates are steady with the jobbing quotations unchanged at: Melyn, $6.50@7; Alloway, $5.75@6.25; coke, $4.87½@6.50; ternes, $5.25@8; additional X, $1.50@1.75 more.

LEAD.

Lead is steady, the latest quotations on the New York exchange being 4.67½c. Here the jobbing quotation is 5@5¼c, according to quantity. The London quotation is £12 12s 6d; St. Louis, firm, 4.55@4.57½c; manufactured pipe, 7⅛c; sheet, 7¾c; tin pipe, 50c; tin-lined pipe, 12½c; old lead, in exchange, 4¼c; tea, 3¾c.

SPELTER.

Spelter is quiet at: Round lots, New York, 5.70c for spot and 5.60c for futures; jobbing, 5⅝@5⅞c; sheet zinc, cask lots, 7@8c; small lots, 7¼@8¼c; St. Louis market is quoted firm at 5.50c bid; London, £22 5s.

ANTIMONY.

Antimony is in a little better demand: Cookson's, 8¼@8½c; Hallett's, 6⅞@7c; United States, Star and other brands, 6½@6¾c. The above prices are for round lots in New York; small lots, Hallett's, would cost 7¼@7½c in New York and 7¾c here.

NICKEL.

Nickel is steady at 40@47c for large lots. Small lots as high as 60c.

PLATINUM.

Platinum is firm, with a good demand: New York, $19 per oz for large lots.

QUICKSILVER.

Quicksilver is steady: New York, $47 per flask for large lots; small orders, more; San Francisco, lower at $44.50@46, domestic orders; exports, $42@43; London is steady at £8 12s 6d.

ALUMINUM.

Aluminum is quiet and unchanged: No. 1 ingot, 33@37c per lb; No. 2, 31@34c; rolled sheet, 4c and up.

A PLAYFUL BOY.

"Your little brother seems to be a playful boy."

"Yes, he is. He's very playful. When sister was married he stopped up the chimney, threw pepper in the furnace, put brandy in the lemonade and turned the hose on the minister. Oh, he's playful, all right."—Cleveland Plain Dealer.

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box.
IC	14x14	$10 25
IC	14x20	7 85
IX	14x20	9 10
IXX	14x20	10 35
IXXX	14x20	11 60
IXXXX	14x20	12 85
IC	20x28	15 45
IX	20x28	17 95
IXX	20x28	20 45

COKE PLATES.

Cokes, 180 lbs	IC	20x28	9 15
Cokes, 200 lbs	IC	20x28	9 35
Cokes, 216 lbs	IC	20x28	9 65
Cokes, 216 lbs	IX	20x28	11 75

PIG IRON.

Lake Sup. Charcoal	$25 00@$26 00
Local Coke Fdy No. 1	23 0 @ 23 50
Local Coke Fdy No. 2	22 50@ 23 00
Local Coke Fdy No. 3	22 00@ 22 50
Local Scotch Fdy No. 1	23 50@ 24 50
Ohio Strong Softeners, No. 1	24 00@ 24 50
Southern Silvery	23 85@ 25 85
Southern Coke No. 1	22 35
Southern Coke No. 2	21 85
Southern Coke No. 3	21 35
Southern Coke No. 4	20 85
Southern No. 1 Soft	22 35
Southern No. 2 Soft	21 85
Alabama Car Wheel	28 35@ 29 35
Malleable Bessemer	22 00@ 23 00
Jackson Co. Silvery	29 30@ 30 30

BLACK SHEET STEEL.

No. 16	per 100 lbs. $2 65
No. 18 2)	per 100 lbs. 2 75
No. 22 24	per 100 lbs. 2 85
No. 25 26	per 100 lbs. 2 95
No. 27	per 100 lbs. 3 05
No. 28	per 100 lbs. 3 15
No. 29	per 100 lbs. 3 30

SMOOTH STEEL.

Wood's Smooth	No. 15-17	2 85
" "	No. 18	2 95
" "	No. 20	3 05
" "	No. 22-24	3 15
" "	No. 25-26	3 25
" "	No. 27	3 35
" "	No. 28	3 45

PATENT PLANISHED SHEET STEEL.

Patent Planished Sheet Steel. "A" $10 20, "B" 9 20

GALVANIZED IRON

F.O.B Chicago 70&10%

HOOP IRON.

¾x22	¾x20	¾x20
$3 20 100lbs.	$3 10 100lbs.	$3 00 100lbs.
1x20	1¼x19	1½x19
$2 90 100lbs.	$2 85 100lbs.	$3 75 100lbs.

PAINTED CORRUGATED IRON.

2½ feet Sheets. 28 gage, per 100 lbs. $2 50

SOLDER.

XXX Guaranteed ½&½	per lb. 20½c
Commercial ½&½	per lb. 20¼c
No. 1 Plumbers	17¾c

SHEET ZINC.

600 lb. Casks	base, per cwt. $6.90
300 lb. Casks	per cwt. 7.10
Sheets	per cwt. 7.15

COPPER.

Copper base, 24c

TIN PIGS AND BARS.

Banca, pigs, per lb	35@35½c
Straits pigs, per lb	35c
Straits in bars, per lb	37c

LEAD.

American Pig	$4 60@4 62½c
Bar	6¼
National (White) brands (in less than 100 lb. lots) per lb	7½c

HARDWARE.

ADZES.

Carpenters'.	
Ajax	50%
Blood's	40&5%
Hunt's	25%
White's	12½%
Coopers'.	
Barton's	20%
White's	15%
Ship.	
Ajax	50%
Blood's	40&5%
Hunt's	25%
White's	12½%

AMMUNITION.

Caps, Percussion—per 1,000.

F L Waterproof, 1-10s	40c
G D	35c
Eley's	52c
Cartridges.	
Peters Rim Fire Ctgs	50&3%
Peters Cent Fire, Pistol & Rifle	25&3%
Peters Cent Fire, Military and Sporting Ctgs	15&8%
Peters Blank Ctgs, except 22 and 32, an additional 10% from above discount.	
Peters Blank Ctgs. 22 cal.	$1 18
Peters Blank Ctgs. 32 cal., C. F.	4 40
Peters B B Caps, Round ball	$1 44
Peters B B Caps, Conical ball	$1 85
U. M. C. Rim Fire Ctgs	50&3%
U. M. C. Cent. Fire, Pistol & Rifle	25&3%
Winchester Cent. Fire, Military and Sporting Ctgs	15&8%
U. M. C. B B Caps, Round Ball	$1 75..18%
U. M. C. B B Caps, Con. Ball	$1 85 net
U. M. C. Rim Fire Shot Ctgs.	50&15&3%
U. M. C. Cent. " " "	25&1o&3%
Primers.	
Berdan Primers	$1 00
Peters Primers	1 20
U. M. C. Primers	1 20
Winchester Primers	1 20
Shells.	
Peters Empty Paper Shells, 10 and 12 gauge. League	25&2%
Peters Empty Paper Shells, 16 gauge. League	20&2%
Peters New Victor Nitro Shls.	20&2%
Ideal	25&7%
Peters Loaded Shells. League and Referee Semi-Smokeless	40&1%
Peters New Victor Loaded Shells with King's Smokeless	40&6%
Ideals Loaded with King's Smokeless	40&10&10&1%
U. M. C. New Club, 16 gauge	20&2%
U. M. C. New Club	25&2%
U. M. C. Nitro	20&2%
U. M. C. High Base	20&2%
Winchester Blue Rivals	40&1%
Winchester Yellow Rivals	
Winchester Repeater	20&2%
Winchester Leader	40&6%
U. M. C. Loaded Shells, Black Powder	40&1% full cases
Winchester Loaded Shells, Black Powder	
U. M. C.	Smokeless 40&10&10&1% full cases
Winchester	
Gun Wads—per 1,000.	
Peters Gun Wads	18%
U. M. C. Gun Wads	18%

Powder.		Each
King's Smokeless, kegs		$11 30
" "	½ kegs	5 80
" "	¼ kegs	2 97
" "	1-lb. cans	51
" "	1-lb. " rifle	70
Dupont's	50-lb. drum	22 45
" "	25-lb. kegs	11 30
" "	12½-lb. kegs	5 80
" "	6¼-lb. kegs	2 97
" "	1-lb. cans	51

Shot.

Dropshot, sizes smaller than B, 25-lb. bags, per bag	$1 40
Drop shot, B and larger sizes, 25-lb. bags, per bag	1 65
Buck Shot, 25-lb. bags, per bag	1 65
Chilled Shot, 25-lb. bags, per bag	1 65

ANVILS.

Trenton, 70 to 80 lbs	9¾c per lb
Trenton, 81 to 150 lbs	9c per lb

AUGERS.

Boring Machine	65&10%
Carpenters' Nut	65&10%
Hollow:	
Ives' New Pattern	25%
Bonney's—list $30.00	65&10%
Stearn's, No. 1 *doz.*	$42 00
Stearn's, No. 3 "	33 50
Post Hole.	
Dalbey, 8-inch per doz.	$ 5 75
Digwell, 8-inch "	13 00
Howe's, 6 and 8-inch "	12 50
Vaughan's, 4 to 9-inch "	7 00
Rafting.	
Snell's	50&5%
Ship.	
Snell's, with or without screw	40&5%

AWLS.

Brad, handled per doz.	$0 26
shouldered, ass'd, 1 to 4 per gr.	1 10
patent, asst'd, 1 to 4 "	95
Harness, common "	1 20
patent "	95
Peg, shouldered "	1 10
patent "	40
Scratch, No. 2, handled "	4 50
No. 1, socket handled per doz.	1 15
Sewing, common per gr.	1 10
patent "	95

AXES.

Boys', Handled:	
Camp Fire, 3-lb., per doz	$5 75
" " 4-lb., freighters', per doz	6 75
Cast Steel, good grade, pr. dz.	5 50
Pioneer, per doz	6 75
Broad:	
Peerless	50%
Plumb's Canada Pattern,	50 10-5%
" Western "	40-10-5%
Red Warrior, per doz	$18 50
Firemen's, per doz	15 50
Single Bitted (without handles)	
Gladstone, per doz	$7 25
Hubbard's " "	6 50
Hunt's " "	6 50
Lippincott's " "	6 50
Mann's " "	6 50
Pioneer " "	6 75
U. S. A. " "	7 75
Valley Forge " "	6 00
Second Quality " "	5 75
Double Bitted (without handles):	
Lippincott's per doz	$8 50
Mann's " "	8 50
Pioneer " "	9 25
U. S. A. " "	11 00
Valley Forge " "	8 25
Ship, Blood's " "	18 50

BALANCES, SPRING.

Frary's	50%
Pelouze	20%

BAGS, PAPER NAIL.

Pounds	3	5	10	16	20	25	
Per 1,000	$1 60	1 85	2 60	3 40	3 90	4 75	

BARS, CROW.

Pinch or Wedge Point cwt. $3 40

BEAMS—SCALE.

P. S. & W Co 40%

BEATERS.

Carpet, Rattan per doz	$2 40
Raymond's Steel Wire, "	80
Woven Wire, No. 4 " "	1 10

Egg.

Dover Pattern per doz.	$0 70
Genuine Dover "	0 90
Mammoth Dover "	1 75
Lightning "	0 84
Lyon's (standard size) "	1 75
Whip, French "	1 35
Spiral "	0 40
Spoon "	0 40
Surprise per gro.	1 45

BELLOWS.

Blacksmiths'	70&5%
Hand, 8 in. per doz.	$ 6 85
10 in. "	8 40
Molders', 12 in. per doz.	13 00

BELLS.

Call.

2¾ in. nickeled bell per doz.	$ 1 35
2¾ in. " brass bell "	3 60
3 in. " " " "	7 50
3 in. " silver alloy bell, per doz.	16 50
4½ in. " brass bell and base per doz.	14 50

Cow.

Ordinary Goods	70&5%
High Grade	60&10%
Jersey	70&10%

Door.

Bigelow Automatic per doz.	$9 50
Rotary.	
3 in. bronzed iron bell "	5 25
3 in. nickeled " " " "	7 50
3½ in. " " " "	9 00

Hand.

Hand Bells, Polished	60@60&10%
White Metal	50%
Nickel Plated	40%
Swiss	60&5%
Silver Chime	33⅓%

Miscellaneous.

Church and School, Steel Alloy					50, 10 & 5%
Farm, lbs	40	50	75	100	
Each	$1 10	$1 30	$1 85	$2 65	

Miscellaneous Cont.

Strapped Sheep per doz.	$1 90
House Gong	40&5%
Sleigh, Round, Loose	40&5%

BELTING

Leather—List dated Nov. 12, 1901.

Standard	75%
Eclipse	60&10%
Extra Grade	50&10%
Rubber—	
Standard	75&5%
Amherst	65&10%
Extra	60&2½%

BEVELS—TEE.

Stanley's, rosewood handle, new list	40&5%
Stanley' ron handle	40&5%

BINDING—OIL CLOTH.

Zinc	75, & 10%
Brass	75%
Brass Plated	75 & 10%

BITS.

Auger.	
Extra Double Spur	70&5%
Ford Improved	40&10%
Irwin	30&10%
New Jenning's	50&10%
Russell Jenning's	25&7½%
Clark's Expansive	50, 10&5%
Steer's " Small new list	$22 00
Irwin Car	30&10%
Snell's Car	60&5%
" Ship	40&5%
" " Auger Pattern Car	40&5%
Center	40&10%
Countersink—	
Wheeler's per doz.	$1 60
American Snail Head "	0 70
" Rose " "	0 80
" Flat "	0 70
Buck Bros'. Flat "	2 60
German "	0 70
Dowel, New Jennings	40&10%
Gimlet—	
Standard Double Cut	50&5@50&10%
German Pattern per doz.	$0 48
Gouge "	0 80
Spoon "	0 80
Countersink "	1 30
Reamer—	
Buck Bros.' ½ Round "	2 75
" " Square "	2 50
Standard ½ Round "	0 75
" Square "	0 75
German Octagon "	0 75
Screw Driver—	
Round Shank "	0 48
" " extra quality "	1 40
Square Shank "	1 10

BLACKING—STOVE. (See Polish.)

BLADES—SAW.

Butchers'—	
Standard ¾ & 1¼in	60&5%
Clock Spring	60&5%
Star	20%
Hack—	
Disston's	25&5%
Griffin's	35&5%
Star	20%
Wood —	
Jackson's per doz.	$2 25
Disston's—No. 6, 16, 26 & 045, $4 20; No. 11, $6.30.	
W. M. & Co.'s No. 20. per doz.	$5 50

BLOCKS.

Snatch—	
Wooden	50&10%
Steel	40&10%
Tackle—	
Wooden	70&5%
Steel	50, 10&5%

BOARDS.

Stove	40%
Wash—	
Anchor per doz.	$1 60
Globe "	2 10
Banner "	2 60
Crystal "	3 15
Brass King "	3 15
Nickel Plate "	3 15
Enamel King "	3 15

BOBS—PLUMB.

Carpenters', 8½ oz. iron pr. dz.	$0 65
1½ lb. " " "	1 60
2¾ lb. " " "	1 80
13 oz. lead "	3 00
6½ oz. brass "	3 30
Mason's, 3 lb. lead "	4 00

BOILERS—FARM.

Profit	30&5%
Solon	35&5%

BOLTS.

Carriage, Machine, Etc.	
Carriage	60&5%
Machine	60&5%
Elevator	50-10&5%
Plow	45&5%
Stove	50-5%
Tire	72½&5%
Wagon Box Strap	70&10%
Mortise Door—	
Gem	50-10&5%
Ives'	50&10%
Barrel—	
Cast	50%
Wrought	50&5%
" Bronzed	75&5%
Flush, Wrought, B. K.	40&5%
Spring—	
Wrought	75&10%
" Brass	75&10%

BOLTS—CONTINUED.

Square—
Cast.....40%
Wrought.....60-10&10%

BORERS.

Angular, Miller's Falls, per doz $12 75
Bung, Common Ring with Handle—
Inches..... 1½ 1¾ 2
Per doz.....$6 00 6 90 8 10
Enterprise Mfg. Co., No. 1 List $1.50; No. 2, $2.00 each....25-10&5%

BOXES.

Mail, No..... 5 10 20
Per doz.....$3 65 10 50 13 00
Mitre—
New Langdon.....15&5%
Olmsted's.....15%
Stanley's.....30%
Seavey's.....per doz 8 00
Twine, Nos... 20 30 25 121
Per doz....$1 50

BRACES.

Common Ball.....$1 35@1 45
Barbers' Pattern.....60&10%
Fray's Gen. Spofford's.....50&10%
" No. 66 to 146.....50&10&7½%
P. S. & W. Co.'s Peck's Adjustable.....50-10&5%

BRACKETS.

Hay-Rack, Wenzelmann's No. 1, $12.50; No. 2, $13.00 per doz.
Shelf—
Cast Iron, Plain.....50&10%
Stanley's Wrought Steel.....70-10&2½%
Wire.....75-10&5%

BROILERS.

Wire.....70&10%
Crown, Self-Basting, No. 80..doz. $2 90

BUCKETS.

Pump Rubber—
Wychoff.....per gr. $4 75
Cooper.....5 50
Champion.....7 50
Victor.....9 50
Star.....5 00
IXL.....6 75
Well—
Galv'd Qts..... 8 10 12
Per doz.....$2 50 2 85 3 15
Wooden, top ear, plain, per doz 3 40
" " swivel " 4 65
" side-strap, plain " 3 50
" " swivel " 4 75

BUCKS, SAW.

Folding.....per doz $1 75

BURS, RIVETING.

Copper Burs Only.....35-10&5%
Tinners' Iron Burs Only.....70%

BUTTS.

Cast-Iron.....65&10%
Wrought Brass.....20%
Wrought Steel Bright—
Nos. 800, 804, 808, 810, 814 and 834.....70-10-10&5%
Nos. 838, 840 and 842...70-10-10&5%
Nos. 822 and 823.....75-25-10-10&5%
Wrought Steel, Japanned—
Nos. 731 and 727.....70&10&10%

CALIPERS.

Double.....40&10%
Inside and Outside.....40&10%
Wing.....40&5%

CALKS.

Logger's Boot, (Lufkin R. Co's.).....per M $3 65
Toe.
Shoenberger.....per lb. 5c
Bessemer.....5½c
American.....7½c
Swedes.....8¾c

CANS.

Cheese Factory Can Stock—
Gallons..... 15 20 30 40
Per set....$2 90 $3 15 $3 75 $4 75
Milk Cans—Gals.. 5 8 10
Elgin Pat., each, $ $2 00 $2 25
Iowa " 1 65 1 90 2 10
New Elgin" 2 10 2 25
New York " 2 10 2 35
Oil—
1 Gal. glass, Daisy....per doz. $2 35
1 " cushioned " 3 90
Star, gals..... 1 2 3
Per doz..... $1 85 $3 00 $3 90
Per doz.
Champion Faucet, 5 gallon...$ 5 65
Sterling Tilting....5 " ... 8 25
"High C" Pump...5 " ... 9 25
Eureka Pump.....5 " ... 12 25
Wood Jacket.....50-10&5%

CAPS—GUN.

See Ammunition.

CARRIERS.

Hay—
Myers' Imperial.....each $3 40
" Clover Leaf..... " 3 40

CARTRIDGES.

See Ammunition.

CASTERS.

Acme—Ball Bearing.....35%
Bed.....65&10%
Common Plate—
Brass wheel.....60&10%
Iron and porcelain wheel.....60%
Philadelphia Plate.....70%
Martin's.....40-10&5%
Payson's.....75%
Tucker's—Wood and iron wheel..70%
" Rubber wheel.....65&10%

CATCHERS—GRASS

Lieder's No. 1.....per doz, $6 25
Eureka..... " 4 25
Ideal No. 4..... 50

CHAIN AND CHAINS.

Breast Chains—
Doubleslack.....doz. pairs $5 00
With Covert snaps " 4 75
" slide..... " 2 90
Without slide..... " 2 60
Bright Oz Chains—
5-16in. $6 75: ¾in. $5 75 per 100 lbs.
Bright Coil Chain—
American, new list.....33⅓%
German.....60-10&5
Triumph, new list.....30%
Cable Coil Chain—
Inch..... 3-16 ¼ 5-16 ⅜
Per 100 lbs...$9 75 $7 25 $5 90 $4 75
Inch..... 7-16 ½ ⅝ ¾
Per 100 lbs...$4 60 $4 50 $4 35 $4 25
Cable Log Chain—Advance 25c per 100 lbs. on Cable Coil.
Cow Tie Chains—
American 2 toggle.....40-10 & 5%
" toggle and snap, 40-10&5%
" open and closed ring.....40&5%
Halter Chains—
American, new list.....33⅓%
German.....60-10&5%
Niagara, new list.....40&5
Triumph, " 30%
Jack Chain—
Brass.....60%
Iron.....60%
Picture Chains—
Light Brass, 3 ft.....per doz. 63c
Heavy " 3 " ..... " 75c
Pump Chain—Galvanized per 100 lbs.....$4 45
Safety Chain—Brass.....60&10%
Stretcher Chains—
5-16 in., $7.75—⅜in., $7.00 per 100 lbs.
Tie-Out Chains—Browns.....70&10%
Trace Chains—Western Standard—
6½— 6-2.....per pair 26c
6½— 8-2..... " 30c
6½— 8-3..... " 29c
6¾—10-2..... " 35c
7 —10-2..... " 40c
Add 2c per pair for Hooks.
" 2c " for Twist Link.
Wagon Stay Chains—
Inch ¼ 5-16 ⅜
Per 100 lbs. $6.50 $8.00 $5.25
Well Chains—
With Swivel.....per doz. 95c
Without " ..... " 80c

CHALK-CARPENTERS'.

Blue.....per gross 58c
Red..... " 48c
White..... " 38c
Common White Sch'l Crayon..... " 5½c
D. M. Steward Mfg. Co. Metal Workers' Crayons, ...gr. $2.50
Soapstone Pencils, round flat or square.....gr. $1.50
Rolling Mill Crayons. gr. $2.50
Railroad Crayons (composition) gr. $2.00
Case lots 20%

CHARCOAL.

In barrels.....per bu. 21c

CHECKS-DOOR.

Blount.....30%
Blum-Jap'd, $6.25; Brzd., doz... $7.00
Columbia.....50, 10&5%

CHISELS.

Box—
Inches..... 10 12 14
Round...per doz. $2.10 $2.25 $2.75
Flat.....per doz. 2.85 3.60 4.20
Cold—
Good quality.....per lb. 12@ 20c
U.S.A., extra quality..per lb. 28c
Socket, Framing and Firmer—
Barton's..... 20%
P. S. & W. Co's..... 70%
For beveled back, add..per doz..... 60c
Tanged, Firmer—
P. S. & W. Co's.....35&5%
With Handles add.. per doz. 60c
Choppers, Enterprise Meat—
No. 12.....$2 75
No. 22..... 4 50

CHUCKS-DRILL.

Standard Tool Co.'s.....40%
Goodell's, for Goodell's Screw Drivers..... $6.25
Yankee, for Yankee Screw Drivers..... 5.00

CHURNS.

Anti-Bent Wood, Gal.. 5 7 10
Each..... $3.85 4.10 4.30
Belle, Barrel.....70%
Common Dash, Gal.... 4 5 7
Per doz..... $6.75 7.50 8.00
Union, Gal..... 5 7 10
Each..... $3.65 3.90 5.00

CLAMPS

Adjustable—Martin's..... 40%
Carpenters'—Steel Bar..... 50%
Carriage Makers'—P. S. & W. Co.'s..... 40, 10&5%
Hose—
Sherman's, brass, ¾ in., ...per doz. 33c
Double, brass, ¾ in...per doz. 65c
Saw Filers—
Disston's list, $30.00..... 30%
Stearn's, No. 0, $3.50, No. 1, $11.50, No. 3, $5.50 doz.
Wentworth's..... 40%

CLAWS-TACK.

Cast, wood hdle...per doz., 45@ 60c
Forged steel, wood handle .....per doz. 80c
Solid Steel.....per doz. $1.60
Giant..... .....per doz. .60

CLEANERS.

Pot—Wire.....per doz. $0.45
Side-Walk—Steel.....per doz. 3.15
Window—
Peerless.....50, 10&5%
XLCR.....65&10%

CLEAVERS.

Butchers'—F. R. Plumb's.....35&5%
Family—Ajax, In..... 6 7 8
Per doz..... $5.50 5.75 6.25

CLEVISES.

Malleable.....per lb. 4½c

CLIPS.

Axle.....65&5%
Damper—
Standard.....per doz. $0.70
Troy " .38
Hame..... " .20

CLOTH.

Emery—
Ajax.....50&10%
B. & A.....50%
Hardware Wire—full rolls (100 ft.)
2 to 8 mesh black, per 100 sq. ft. $1.85
9 to 12 " " " " 2.15
2 to 8 " galv, " " 2.70
7 and 8 " " " " 3.25
An extra charge is made for 50 ft. lengths, and a still further advance for smaller pieces.
Screen Wire—
12 mesh, painted, per 100 sq. ft. $1.15
14 " " " " 1.85

COCKS--BRASS.

Compression Bibb.....60&10&5%
" Lock.....60&10%
Lever Bibb.....60&10%
Liquor.....per doz. $8 75
Racking.....60&10%

COFFEE MILLS.

Enter. Mfg. Co., list Jan 17, '99...25%
Parker's.....50%
Arcade.....60&10%

COLLARS--STOVE PIPE.

Inches	5	6	7
Plain Tin....per gr.	$2.50	$2.80	$3 75
Japanned Tin, "	3.90	4.20	5.40
Lacquered Brass"	3.30	3.60	4.80

COMBS--CURRY.

Nos.	000	20	321	330	417	416
Per doz.	$0.32	.80	1.00	.95	.80	1.00
Nos.	531	533	530	535	545	390
Per doz	$0.96	1.20	1.10	1.65	1.40	1.30

COMPASSES.

Carpenter's.....70%
Pencil--Faber's.....per doz. $1.00

COOLERS--WATER.

Galvanized Lined—Lever Faucet.

Gal.	2	3	4	6	8
Each	$1.35	1.65	2.00	2.35	2.95

Galvanized Lined—Telegraph Faucet

Gal.	2	3	4	6	8	10	15
Ea	$1.65	2.00	2.35	2.65	3.30	3.65	4.90

Porcelain Lined—

Gal.	3	4	5	6	7	8	10
Ea	$4.50	5.75	7.00	7.75	8.60	10.40	12.25

COPPER—SEE METALS.

COPPERS.

Soldering--1 to 2 lb.....per lb. 25@29c
3 lb. and larger..... " 23c

CORD.

Picture--White Wire--List October 1900.....80&10%
Sash—
Baltic Braided Flax...per lb. 18½c
India Hemp, cable laid " 13 c
" " hawser " 12 c
" " plain " 13½c
Italian " cable " 21½c
Russian " " " 17 c
Samson, white " 31½c
" spot " 30½c
Silver Lake, white " 24½c
" " drab " 31½c

CORKSCREWS.

Humason & Beckley.....33⅓%
Walker's.....33⅓%
Williamson's Regular.....50%
Williamson's Forged Worm.....50%

COTTERS--SPRING.

5-16 in. and smaller..... .....80&5%
⅜-in. and larger.....75%

COUPLINGS--HOSE.

Brass.....per doz. $1.00
Brass Plated..... " 85

COVERS, WAGON--SEE TENTS.

CRADLES--GRAIN.

Morgan's Grapevine ..per doz. $21 00

CRAYONS--SEE CHALK.

CROOKS--SHEPHERDS'.

American Pattern .....per doz. $6 75
Montana " ..... " 8 00
Scotland " ..... " 8 00

CROW BARS.

Pinch or Wedge Point, per 100 lbs.....$3 40

CUTTERS.

Meat—
Enterprise Nos. 5, 10, 12, 22, 32, and 42..... .....25%
No. 100, list, $18.00.....40&10%
Nos. 2 and 4.....35%
Ideal.....per doz. $9.75
Universal....No. 1 2 3
Per doz.....$10.75 $13.00 $18.00
Pipe-Stanwoods No. 1 2 3
Each.....$ .85 1.50 4.00
Slaw and Crout—
3-knife Crout.....per doz. $0.25
1 " Slaw..... " 1.35
2 " " ..... " 2.00
Washer..... " 7.75

DAMPERS—STOVE PIPE.

Standard.....10&10%
American.....40&10%

DIES--STOCKS AND

Discount.....40%

DIGGERS—POST HOLE.

Atlas.....per doz. $8.50
Eagle..... " 6.25
Eureka..... " 6.50
Hercules..... " 10.25
Ryan's..... " 17.00
See also Augers—Post Hole.

DIVIDERS.

Wing.....70%
Extension Wing.....35&5%

DOORS--SCREEN.

⅜ in. 4 panel painted per doz. $ 6.75
½ " " " " 7.25
⅛ in. 4 panel natural pine, fancy.....per doz.. 11.25

DOOR HANGERS—BARN.

Single Flange, D. B. Rail, ...per 100 ft. 1 60
Novelty Check Back, ... 3 in 4 in 5 in 6 in
Per doz. pairs, $2.60 $3.90 $4.95 $6.25

DRILLS.

Bit Stock.....60%&65&5%
Blacksmith's Twist.....60%
Breast—
Common.....each, $2.25
Millers' Falls..... " 2.10
Hand—
Goodell's Automatic--per doz.

No. 01	No. 03	No. 3	No 20
$7.75	$12.50	$14.25	$11.00

Goodell's Single Gear per doz. $16.00
Millers' Falls " " " 12.50
" " Double " " 15.00
Reciprocating—
Goodells'.....per doz. $17 00
Bit Stock.
Standard List....60&5%@60%@10%

DRIVERS--SCREW.

Standard.....65&10%
Ajax.....70&5%
Champion..... 50%
" Pattern.....75&5%
Clark's Interchangeable..... 33⅓%
Reed's Lightning.....50%
Goodell's Spiral.....50&10&5%
Yankee Ratchet.....50%
" " Spiral....50&10&5%

ELBOWS.

Conductor.....60%
Adjustable Stove—In. 5 6 7
Smooth....per doz. $0.95 0.95 1.40
Plan'd..... " 2.10 2.35 3.00
Corrugated Stove—In. 5 6 7
Smooth.....per doz. $0.95 .95 1.40
Pol'd..... " 1.70 1.75 2.60
Plan'd..... " 2.60 2.85 3.50
Four-Piece Stove—In. 5 6 7
Smooth....per doz. $0.57 .60 .93
Pol'd..... " 1.00 1.05 1.50
Plan'd..... " 1.50 1.70 2.60

EMERY--TURKISH.

Size.....5-lb. pkgs. ⅛ kegs, kegs.
No. 60 to 150, ½ lb. 6¼c 4¾c 4½c
Flour.... " 5¼c 3¾c 3½c

ENAMEL—IRON.

English, ½-pt. cans...per doz. $1.50
Nubian, " " ... " 1.80
O. V. B., " " ... " 1.25
Peerless..... 1 50

EXTRACTORS--PIG.

See Forceps, Pig.

EYES.

Bright Wire Screw—See Goods, B.W.
Drifting Pick.....60&10%
Hooks and—
Brass.....60&5%
Iron.....65&10%

FASTENERS, STORM SASH.

Moore's.....per doz. $0 80
Schroeder's..... " 1 50
Sensible..... " 1 10

FASTENERS, BLIND.

Zimmerman's.....Net

FAUCETS.

Angle Plug.....per doz. $0 84
Brass--Andrew's.....60&10%
Petroleum.....60-10&5%
Wood--Cedar.....40&50%
Cork Lined..... 60%
Metal Key.....65&5%
Measuring--Enterprise.....35&5%
See also Cocks.

FILES AND RASPS

Arcade.....75&5%
Black Diamond.....70&10%
Disston's.....75&5%
Great Western.....75&5%
Keystone Mill.....80&20%
Kearney & Foote.....75&5%
New American.....75&10&5%
Nicholson's.....70&10%
Royal Mill.....80&20%
N. S. A.....70&10&5%

FILTERS.

Improved Natural Stone. $2 50@13 50
Subject to large discounts.

FORCEPS—PIG

Barber's.....per doz., $7 25
Superior..... 4 75
Whisson's Imp..... 6 00

FORKS

Barley—
Steel.....66⅔, 10&5%
Wood, 4 tines, $5.25: 6 tines, $6.25 doz
Coal.....70, 10&2½%
Coke.....70, 10&2½%
Cottonseed.....70, 10&2½%

FORKS—CONTINUED.

Hay—
Diamond, 2 tine.....65, 10&5¢
" 3 " .....60, 7½, 10&5¢
" 4 " .....66⅔, 10&5¢
Golden Eagle, tine 60,7½,10,10&5¢
" " " ..66⅔,10,10&5¢

Header—
Diamond, 2 tine.....67½&10&5¢
" 3 " .....60, 20, 10&5¢
" 4 " .....66⅔&10&5¢
Golden Eagle, 4 tine.....10&10&5¢

Manure—
Diamond.....60, 20, 10&5¢
Golden Eagle.....60, 20, 20&5¢

Ore.....70&10¢

Potato—
Digging.....65&10&5¢
Scoop.....70&10¢

Spading—
Diamond.....70, 5, 10&5¢
Golden Eagle.....70, 5, 10, 10&5¢

Hack Saw— FRAMES
Crown.....per doz., $ 8 75
Miller's Falls..... " 10 00
Star..... " 2 85

FREEZERS—ICE CREAM

Arctic—Qts... 1 2 3 4 6
Each.....$1 10 1 30 1 50 1 75 2 30
Qts..... 8 10 12 15
Each.....$2 85 3 75 4 50 5 20
White Mountain, with Crank—
Qts..... 1 2 3 4 6
Each.....$1 20 1 65 1 90 2 10 2 70
Qts..... 8 10 12 15
Each.....$3 60 4 60 5 90 7 00

GATES.

Molasses and Oil.
Perfection.....40&10&5¢
Stebbin's.....75&10&5¢

GAUGES.

Butt and Rabbet.
Stanley R. & L. Co.'s..20&10&2½¢
Cream Pail, Fairmont, per doz..$3 75
Marking, Mortise, etc.....
.....50&10¢@50&10&5¢
Saw—Atkin's sgle. 55c, dbl. 80c pr doz.
Wire.
Disston's.....25¢
P. S. & W. Co.'s.....20¢

GIMLETS.

Discount.....40@40&10¢

GLASS—WINDOW.

All sizes, single strength...90-15&5¢
" double strength...90-15&5¢

GLASSES—LEVEL.

Stanley R. & L. Co.....50&5¢

Bulk. GLUE
B Amber.....per lb 9¾c
A White.....per lb 12½c
H. S. Amber.....per lb 17 c
Liquid.
Eagle.....40 ¢
LePage's—
List "A".....37½¢
List "B".....33⅓¢
List "C".....25 ¢

GOODS.

Bright Wire..... 80-10&5¢

GREASE, AXLE.

Wood Boxes.
Diamond.....per gr. $4.75
Frazer's..... 9.25
Hub Lightning..... 5.25
Paragon..... 6.75
Wood Pails.
Frazer's, 15 lb. 78c, 25 lb. $1.30 each.
Hub Lightning, 15 lb. 52c, 25 lb. 68c each.
Tin Cans.
1 lb. Frazer's carriage, pr. doz. $1.30
1½ lb. " wagon " 1.30
3 lb. " " " 2.40
5 lb. " " " 3.50

GRIDDLES

Soapstone.....40&5¢

GRINDSTONES

Family—In..... 7 8 9
Per doz.....$7 75 8 75 10 00
Loose.
Per ton.....$20 00@$21 00
Mounted—
Ball Bearing..... 1 2 3
Each.....$3 10 2 90 2 75
Common Bearing.. 1 2 3
Each.....$2 85 2 65 2 50
Schofield's—
Auto.....each, $3 80
Bitreadle..... " 3 10

HAFTS—AWL

Brad—Common.....per doz., $0.18
Peg—
Common..... " 21
Patent, plain top..... " 46
" leather top.. " 52
Sewing—
Common..... " 21
Patent..... " 52

HALTERS

Jute Rope.....per doz., $0 80
Sisal Rope..... " 1 95
Web..... " 2 10
Leather, rope tie..... " 6 25
" leather tie... " 8 25

HAMMERS—HANDLED

Blacksmiths' Hand
Maydole's.....40&10¢
Plumb's.....50&10&5¢
Engineers'—
Maydole's.....40&10¢
Plumb's Oil Finish.....60¢
" Polished.....50¢10&5¢
Farriers'.
Maydole's.....35&5¢
Plumb's.....40&5¢
Machinists'.
Maydole's.....40&10¢
Plumb's.....5o&10&5¢
Nail.
Ajax.....per doz $5 75
Calumet..... " 3 40
Cast.....per doz $1 10@$1 50
Maydole's.....30&7½¢
Plumb's.....40&5¢
Vulcan.....35&5¢
Riveting.
Maydole's.....35&5¢
Plumb's.....40&5¢
Shoe. Plumb's.....30&5¢
Cast.....per doz 75c
Tack.
All Iron.....per doz $0 35
Pol'd Iron, Hickory hdl " 0 52
Mall. Iron, Inlaid..... " 1 50
Magnetic 1 2 3
Per doz..... 70c 80c 95c
Magazine.....per doz $1 75

HAMMERS—HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs.....70&10¢
5 lbs. and over.....75¢
Masons'—Single & Double Face..75¢
Auger. HANDLES.
Common Ass'd.....per doz $0 36
Peck's Adjustable.... " 2 10
Roger's " .... " 4 15
Ives' " ....per set 1 25
Axe.....40¢
Chisel.
Hickory, Tanged Firmer, Assorted, 24c; Large, 26c per doz.
Hickory, Socket Firmer, Assorted, 18c: Large, 21c per doz.
Applewood, Tanged Firmer, Assorted, 27c; large, 36c per doz.
Applewood Socket, Firmer, Assorted .....per doz 24c
Coal Pick.....40¢
Drifting Pick.....40¢
File, assorted 13c, large 16c per doz.
Hammer.
Adze Eye.....per doz 42c
Blacksmiths'..... per doz 45c@65c
Machinists'..... " 39c@58c
Hatchet.....per doz 42c
Hay and Manure Fork.....40&5¢
Hoe and Rake.....40&5¢
Saw, Plain 72c, Varnished 68c per dz.
Screw Driver, Assorted 42c, Large 48c per doz.
Shovel and Spade.....40&5¢

HANGERS

Barn Door—
King.....per doz. prs., 5 00
Monarch.....60&10¢
"Never Jump" Hinge.....50&10¢
Peerless, Loose Axle.....60&10¢
Perfection, Roller Bearing..70&5¢
Phœnix, Roller Bearing... 70&5¢
Prouty.....per doz. prs., $5 50
Rival..... " " 3 90
Superb..... " " 6 25
Safety Flexible " " 7 50
Wagner's Adjustable.....70@10¢
Warehouse.....60¢
Parlor Door—
Acme.....per set $3 75
Ives' Improved..... " 2 50
Lane's Standard..... " 3 50
" New Model.... " 2 80
Prouty..... " 3 00
Lundy.....50&10¢
Eave Trough—
Baker's.....per gr., $2 60
Imperial.....10¢
Wire.....25¢

HASPS.

Hinge, Wrought.....50, 25, 10, 10&5¢
With Staples—See Staples.

HATCHETS.

Ajax.....40&10&5¢
Blood's.....40&10¢
Cast Claw.....per doz $1 50@$1 75
Cast Shingling.... " 1 20
Duffy's Barrel.....per doz 17 50
Germantown.....35&5¢
Hammond's.....40¢
Plumb's.....40&10&5¢
Plumb's Warehouse.....40¢
Roger's Ideal.....per doz $5 25
Underhill's Star Lath.....40¢
S. A.....30&10¢

HAY RACK BRACKETS.

Wenzlemann's No. 1, per doz...$12 60
" No. 2, " ... 13 20

HINGES.

Blind.
Clark's Gravity, per doz sets....80c
Parker's.....65¢
Shepherd's Noiseless, for Wood casing.....doz. $1 05
Gate.
Clark's, 1 2 3
Hgs & Ltchs. dz.. $2 35 $2 60 $3 60
Hinges Only, " .. 1 70 1 90
Latches Only, " .. 0 70 0 75
Knuckle.....per doz prs $6 00
Leed's..... " sets 6 75
Superior..... " prs 9 25
Spring.
American.....25¢
Bommer Bros. Ball B'rng Floor 40¢
Bommer Bros. Spring Hinges .40¢
Chicago.....25&5¢
Clover Leaf.....per gro $9
Columbia Dbl. Acting....40&10&5¢
Gem.....25¢
Ideal Detachable,....per gro $12 00
New Idea..... " 9 60
Oxford.....20¢
Wrought Iron.
Light Strap Hinges..70-25-10-10&5¢
Heavy Strap Hinges.....
.....75-10-25-10-10&5¢
Light T Hinges....66⅔-25-10-10-&5¢
Heavy T Hinges....60-5-25-10-10&5¢
Extra Heavy T Hinges.....
.....75-25-10-10&5¢
Cor. Heavy Strap..75-10-25-10-10&5¢
Cor. Ex. Heavy T....75-25-10-10&5¢
Screw Hook and Strap.
6 to 12in.....per 100 lbs. $4.00
14 to 20in..... " " 3.75
22 to 36in..... " 3.50
Screw Hook ana Eye.
⅜ to 1in.....per 100 lbs. $6.50
⅝in..... " " 8.00
¾in..... " 10.00

HOES.

Garden.....75&10&5¢
Grub:
Ajax.....50&10&5¢
Extra.....60&10¢
Hazel.....per doz $6 25
Ladies' and Boys'....70 10, 5, 10&5¢
Mortar.....75, 7½, 10&5¢
Planter's Eye..... 60&10&2½¢
Weed.....70, 10, 10&5½¢

HOOKS.

And Eyes.
Brass.....50&10&5¢
Iron.....65&10¢
Awning.....per gro $1 50
Belt.....75&5¢
Bench—See Stops, Bench.
Box, In. 6 8 10 12
Doz.. $1 25 $1 60 $1 70 $2 25
Humason & Beckley's...pr dz $2 40
(See Goods, Bright Wire.)
Bush.
Common Axe Handle
.....per doz $7 00@$8 50
Hamilton Pattern.....per doz $7 25
Chain—In. ⅛&5-16 ¾ 7-16 ½
Per 100 $7 50-7 75 $9 50 $11 25 $12 00
Clothes Line.
Japanned.....per doz 21c@22c
Galvanized..... " 35c
Coat and Hat.
Cast Iron.....per gro 72c@$1 00
Gem Wire.....65¢
Conductor.
Malleable.....50&10¢@50&10&5¢
Wrought.....40&10¢@50¢
Corn.
Common, unpolished, per doz. $1 30
" polished... " 1 70
"Cut Easy,".....per doz. 2 65
Clyde's..... " 2 40
Brooke's..... " 2 65
Gate.—See Goods, Bright Wire.
Grass.
Common, Nos. 2 3 4
Per doz..... $1 70 $1 75 ——
German.....per doz $1 90
Little Giant..... " 3 10
Wood's..... " 1 30
Hammock.
Common..... " 21c
With Plate..... " 36c
With Screw..... " 36c
Piggot's..... " $1 05
Lambrequin or Drapery...per gro 21c
Picture.....50¢@50&10¢
Potato and Manure.....70&10&7½¢
Screw, Brass.....80&20¢
(See Goods, Bright Wire.)
Seat Spring.....per lb 6½c

HOOPS—TUB.

Ever Ready..... per case $1 65

HOSE—GARDEN.

Ply 3 4 5 6 8
Black, pr ft. 7½c 8½c 9¾c 10¾c 12½c
Cotton, 3 ply.....per ft 6¾c
Red, 3 ply..... " 7¾c

HUSKERS.

Boss.
Nos. E A B P PX
Dz.$1 85 $2 00 $1 95 Gr.$5 90 $5 20
Nos.2000 3000 4000 O OX
Gr.$3 10 $6 75 Dz.$1 15 $2 20 $1 65
Brinkerhoff's.....per gro 14 50
Harrington.....per gro 4 20
Ideal—Nos. 102 101 100
Per doz..... $1 35 $2 50 $2 75
Johnson's.....per gro 7 75

IRON.

See Metals—First column.

IRONS.

Curling.
Common.....per doz 33c@48c
Princess.....per doz $0 60
Yale..... " 0 84
Oxford..... " 1 10
Ruby..... " 1 50
Tourist, Folding..... " 0 90
Pinking..... " 0 60
Plane.
Wood Bench.....20&5¢
Stanley R. & L. Co. (new list)25&5¢
Sad.
Charcoal.....per doz $11 25
Common, Polished, per 100 lbs 3 50
" Nickel Plated, " 4 75
Chinese Polishing.....per doz 7 60
Laundry, No. 1, $5 75; No. 2, $6 25 per doz.
Mrs. Pott's.
No. 50 J, Enterprise...per set 76c
No. 55 J, " ... " 73c
No. 50 T, " ... " 79c
No. 55 T, " ... " 76c
No. 50, Howells..... " 77c
No. 55, " ..... " 74c
Tailors' Sad.....per lb 4¼c
" Geese..... " 4¼c
Tuyere.
Single Duck Nest.....per doz $5 25
Double " " ..... " 6 25
Sutton.....each 2 60

JACKS.

Locomotive.....75&5¢
Wagon.
Meeker's.....per doz $11 25
Miller's No. 2..... " 7
Winner..... " 7

KETTLES.

Brass.....20¢
Caldron..... 50¢
Copper.....per lb 27½c
Maslin.....65&10¢
Sugar.....50&10&5¢

KNIVES.

Beet Topping.
Clyde, 9-in. Scimiter Blade.dz $4 15
" 12-in. Straight " .dz 2 50
Cooper's Hoop.....15¢
Corn.
Acorn.....per doz $3 65
Ajax..... " 2 25
Clipper, Light, $1 75; Heavy, $1 90 per doz.
Disston's.....per doz $3 15
Easy..... " 7 75
Rugged Razor..... " 2 40
H. S. Earle's..... " 3 15
Drawing.
Standard.....70¢
Adjustable.....30¢
Barton's Carpenters'.....10&5¢
" Folding Handle....25&5¢
Hay.
American, Sickle Edge...doz $10 25
Canton, Sickle Edge..... " 8 25
Heath's..... " 8 25
Lightn'g, Holt's Genuine " 6 50
Lightning Pattern..... " 6 25
Wadsworth's Sp'r Point. " 8 75
Hedge.
Ajax, Heavy, $5 75; Ex. Heavy, $7 75 per doz.
Mincing.
Common, Single.....per doz 48c
" Double..... " 65c
Streeter, 4 Blade, $1 30; 6 Blade, $1 90 per doz.
Putty.
Common.....per doz 84c
Goodell's.....per doz $1 30@$1 80
Russell's..... " 1 75@ 2 25

KNOBS.

Base, 2½-in. Maple, Rubber Tip,
..... per gro $1 60
Door, Mineral.....per doz 0 80
Porcelain..... " 0 90
Jet..... " 0 88
Picture.....60&10&5¢

LADDERS.

Common Long.....per ft 8½c@13c
Extension.....per ft 10¾c
Step.
Common..... " 6½c
" With Shelf, add 10c.
I X L.....per ft 17c
Miller's Household. per ft 13c@15c

LANTERNS.

Bull's Eye Police.
3-in Flash Light.....per doz $6 00
2¾-in Regular..... " 4 00
3-in Regular..... " 5 00
Tubular, Berger.....40&10&5¢

LEADERS—CATTLE.

Nos. 1 2 3
Per doz... $0 70 $0 85 $3 75

LEATHER—LACE.

Cut.....50&10¢
Sides, Ex. Quality.....per sq ft 20c

LEATHERS—PUMP.

Valve and Plunger.....5¢

LIFTERS.

Stove Cover.
Japanned.....per gro $2 75
Coppered..... " 3 60
Chilkoot..... " 4 75
Devore's..... " 5 50
Zero..... " 3 90
Transom, Payson's.....70& 10¢

LINES.

Chalk, Twisted in 20-ft hanks.
Nos. 15 14 13 12 11
Per doz.. 10c 12c 17c 22c 29c
Twisted in 50-ft balls.
Nos. 1 2 3 4
Per doz.... 24c 30c 36c 44c
Braided in 20-ft hanks.
Nos. 0 1 2
Per doz.... 23c 26c 32c
Masons', in 100-ft hanks...doz $1 00
Clothes.
60-ft Jute.....per doz $0 90
72-ft " ..... " 1 00
60-ft Sisal..... " 1 50
72-ft " ..... " 2 00
60-ft Cotton..... " 1 25
50-ft Braided Cotton.....90¢

LINING—STOVE.

In Bricks.....per crate 42c

MACHINES.

Boring	Without Augers.	With Augers.
Ajax.....per doz	$5 25	$6 75
Angular... "	3 25	5 00
Boss..... "	4 50	5
Upright... "	2 90	4

Leather Riveting.
Chicago, Pomeroy....per doz $9 75
Excelsior..... " 2 50
Handy..... " 2 10
Little Giant..... " 3 10
Pony, Pomeroy..... " 8 00
Washing.
Boss. 1 2 5 8
Per doz.. $57 00 $63 00 $69 00 $90 00
Globe, No. 1.....per doz $51 00
O K Rotary..... " 58 00
Round Wayne..... " 26 50
U. S. Steel..... " 60 00
Western Square, No. 2, $26 50; No. 3, $28 50 per doz.

MALLETS.

Carpenters'.

	Fibre Head, Small.	Med.	Large.
Per doz.	$5 00	$5 75	$6 75

Round Hickory.....per doz $1 75
" Lignumvitæ.... " 2 75
Square Hickory..... " 1 75
" Lignumvitæ.. " 3 25

Tinners'.
Applewood ..... " 1 65
Hickory..... " 0 80
Hickory Sheet Iron. "

Door. MATS.
National Rigid.....60&5%
Queen Flexible 50%

Stove.
Standard Quality.....per gross $2 75
Best " (Pure) " 4 75
Wire Covered Asbestos, Ex. Heavy .....per doz 1 00

MATTOCKS.

Ajax.....5"&10%
Extra.....60&5%

MAULS.

Iron, lbs.	10	13	16	18	21
Per doz.	$3 40	$4 20	$5 00	5 50	$6 00
Wood face, lbs.	10	11	12		
Per doz.....	$4 75	$5 00	$5 25		

Wood Choppers'.
Lake Super'r & Oregon Pat.70&10%

MEASURES.

	½ pk	1 pk	½ bu
Galvanized..per dz		$3 75	
Japanned.... "	$1 50	2 25	$2 90
Iron Bound. "	1 40	1 70	2 00

METAL.

Babbitt.
Alm .....per lb 8¾c
Best..... " 23c
Common, No. 4..... " 6½c
Copper Mixed..... " 18½c
Magnolia Metal..... " 19c
Tony..... " 10½c
See Metals—In first column.

MICA

First Quality.....40, 10&5%
Second Quality..... 60%

MILLS—COFFEE.

Enterprise.....25&5%
National.....30%
Parker.....50&10%@60%

MOPS.

Erie .....per doz $3 15
Handled Cotton.

Lbs.	¾	1	1¼	2
Per doz..	$1 40	$2 10	$2 25	$2 95

MOWERS—LAWN.

Ball-Bearing.

In.	15	17	19	21
Each.....	$7 00	$7 60	$8 25	$8 90

Champion.

In.	12	14	16	18	20
Ea..	$2 10	$2 15	$2 15	$2 20	$2 35

Champion, High Chief.

In.	16	18	20
Each.....	$3 40	$3 70	$4 00

Cheap Grades.

In.	12	14	16	18
Each.....	$1 90	$1 95	$1 95	$2 10

Clipper .....50&10&10%
Girard, in. 14 16
Each $2 60 $2 80
Philadelphia.
All Styles Except A & E.....70&5%
Style A.....60&5%
Style E, High Wheel.....70,10&5%
Drevels..... 50%
All Day.....Net Price

MUZZLES.

Horse.

Nos.	1	2	3	4	5
Doz.	$0 30	$0 50	$0 55	$0 70	$1 00

NAILS.

Horse Shoe.
Ausable.....50%
Capewell 10%
Perfect.....40&5&
Putnam 33⅓%
Star 35%
Picture.
Brass Head.....40&10%
Judd's .....40&10%
Brads.....80&10&10%
Wire Nails—Small lots.....$2.30
Car load lots..... 2.20

NETTING—POULTRY.

Galvanized Before Weaving..80&20
" After Weaving...80&15
Cut Pieces.....65&5%

NIPPERS.

End Cutting.
P. S. & W. Co.....40&5%
Stubb's Pattern .....40&10&5%
Hoof.
Heller's.....40&5%
P. S. & W. Co.....40&10%
V. & B 40-5%

NOZZLES.

Hose.
Genuine Boston.....per doz $3 40
Genuine Gem..... " 3 60
Magic ..... " 3 60

NUTS—HOT PRESSED.

Square Blank.

In.	¼	⅜	½	⅝	¾	⅞	1
Lb.	7½c	5½c	4½c	4½c	4½c	4½c	4½c

Square Tapped.

In.	¼	⅜	½	⅝	¾
Lb.	14c	9½c	7½c	6½c	6½c

OILS.

Linseed, Pure boiled .....per gal 45c
" " raw..... " 44c

OILERS.

Chase Pattern.
Brass and Copper .....50&10%
Zinc.....70&5%
Engineers'.
Cannon ..... 4 &5%
Steel ..... 60&10&5%
Tin .....per doz $2 25@$2 75
Machine.
Ajax.....per doz $0 80
Copper Plated Steel... " 1 50
Malleable Iron.....40&10&5%
Tin.....per doz 55c@65c

OPENERS.

Box, in. 10 12 14
Flat ..per doz $2 85 $3 60 $4 15
Round.. " 2 10 2 25 2 "
Can.
American.....per doz $0 26
Delmonico..... " 1 50
Never Slip..... " 0 68
Perfect ..... " 1 35
Tip Top..... " 0 84
Crate, V. & B..... " 5 75

OUTFITS—COBBLING.

Combination ....per doz $11 50
Economical ..... " 4 90
Family..... " 10 00

PADLOCKS.

Standard Wrought.....70&10&5%
Champion 50%
Eureka..... .....40&10&5%
Yale..... .....60&5%

PAILS.

Cream.
14-qt., Without Ga....per doz $3 00
20-qt., " " .... " 3 50
20-qt., With Gauge.... " 5 00
Sap, 10-qt., Galvanized, $1 60; 12-qt., Galvanized, $1 85 per doz.
Stock, Galvanized.

Quarts.	14	16	18	20
Per doz...	$3 75	$4 00	$4 65	$5 25

Water, Galvd, qts. 10 12 14
Per doz..... $2 00 $2 30 $2 60
Wood.
Cable, 2-Hoop, $1 70; 3-Hoop, $1 90 per doz.
Cedar, 3-Hoop, $2 50 per doz.
Standard, 2-Hoop, $1 55; 3-Hoop, $1 75 per doz.

PANS.

Dripping .....50&10&5%
Fry, Common.....60&10&5%
Acme .....66⅔&5%
Roasting.
Brownie.....Each 30c@37c
L. & H..... " 58c@80c

PAPER.

Building.
Plain.....per 100 lbs $1 15
Tarred.. " 1 25
Tarred Felt..... " 1 80
Diamond A, Red Rosin.pr roll 0 63
Leader, Red Rosin..... " 0 48
Sand and Emery.
Ajax.....50&10%
B. & A.....50 & 5%
Wrapping.
Grecian Express .....per lb 3½c
Rag..... " 2½c

PARERS.

Apple.
Bay State .....per doz $13 00
Reading ..... " 6 75
Turntable ..... " 6 00
White Mountain..... " 5 25
Potato.
Goodsell's Saratoga..per doz. $6 50
White Mountain..... " 6 00

PICKS

Adze Eye Ore.....60&5%
Drifting and Pol. Picks.....60&10%
Ajax Railroad.....50&5%
Extra Railroad.....60&10%
Surface.....60&10%

PINCHERS.

Carpenters', wrt. iron, pol. steel jaws.....30%
Blacksmiths'.....50%
P. S. & W.....40&10&5%

PINS.

Clothes.
Common..... .....per gr. $0 12
Hoyt's..... " .. 30
U. S..... " .. 70
Picket.
Fluted..... .....per doz..$0 90
Round..... " .. 1 75
Spiral ..... " .. 1 90

PIPE.

Conductor.	Nested	Not nested
Eastern	75&5%	75%
Central	75%	70&10%
Southwst'n	65-10&7½%	65-10&2½%
Mo. River	75%	70&10%
Southern	70&5%	75%

Lead.
Full coils.....per lb...$0 6½
Cut " ..... " .. 6¾
Stove.

Acme—In.	5	6	7
Smooth, per jt.	10½c	10½c	12½c
Planished, "	32c	33c	43 c
Peerless--Smooth..	8½c	9c	11¼c
Polished.	16c	18c	22 c
Planished	28c	31c	40 c

Made-up—In.	5	6	7
Smooth.....	8¾c	9c	12 c

7 to 6 in. Smooth Tapers, pr jt..14c
6 in, Smooth T's..... " ..30c
7 to 6 in. Planished Tapers.....45c
Wrought Iron Gas Pipe.
⅜-in., black.....discount, 60%
⅜ " ..... " 63%
¾-in. to 4-in, black.... " 69%
4½ " 6 " " 66%
7 " 12 " " 61%
¾ " galvanized " 48%
½ " " " " 50%
¾ " to 4 " " 56%
4½ " 6 " " 52½%
7 " 12 " " 50%

PLANES.

Ohio..... .....60&5%
Stanley Planes, new list..30%@30&5%
Bailey Planes 35%
Sandusky..... .....20%

PLANTERS.

Corn,
Monitor.....per doz..$7 75
Triumph..... " .. 6 00
Potato
Acme.....per doz.. $6 25
Challenge ..... " .. 10 75
Fencing.
Cronk's.....per doz..$9 25
Farmers' Choice..... " .. 8 75
Russell's..... " .. 8 65
Flat and Round Nose.
Bernard's..... .....30%
German..... .....50%
Lodi..... .....40%
Paragon..... .....40&10%
P. S. & W. Co. 60%
Gas—In. 8 10 12
Per doz.....$3.10 $4.00 $4.90

PLUMBS AND LEVELS.

Common.....75%@75&10%
Cook's.....40%
Davis' Iron 30%
Davis' Inclinometer.....20%
Stanley's

Nos.	00S	0S	2S	3S
Per doz.	$4.50	$5.20	$7.60	$8.65
Nos.	30	25	50	35
Per doz.	$13.00	$17.50	$17.50	$12.35

POINTS. Discount

Drive Well Points.....80&10&5%

POKERS--STOVE.

Wr't Iron, str't or bent, per doz. $0 50
Wr't Iron, wood hand'ls " 75
Nickel pl'td, coil hdl's.. " 70

POKES--ANIMAL.

American .....per doz..... $2 60
Brown's, wr't steel " ..$5 25@6 25
Eagle..... " $4 25
Success..... " 2 60

POLES--FISHING.

Bamboo.

Ft.	12	14	16	18	20
Pr 100..	$2.75	$3.40	$4.75	$6.00	$7.75

POLISH.

Metal.
Pride of the Bar..... " .. 1 60
Putz Cream.

Pts.	1-6	¼	½
Per doz.....	$0.84	$1.25	$1.80

Pts.	1	2	4	8
Per doz.	$3.60	$6.00	$9.00	$18.00

Wondershine

Pts.	1-6	½	1	2
Per doz..	$0.68	$1.30	$2.15	$3.00

Shoe.
M. D. C.....per doz..30c@50c
F. C. O..... " 40c
T. M ..... " 50c@$1 25
Imperial.....per gr.....$5 00
Stove.
Black Eagle, 1 lb cans, pr gr..$15 00
Blackene, 1 lb cans.... " .. 13 00
Black Jack, ¾ lb cans. " .. 9 00
Dixon's Carb. of Iron. " .. 5 75
Nickel Plate..... " .. 4 50
Rising Sun ..... " .. 6 00

POPPERS, CORN.

Round or Square, 1 qt. per doz., 85@95c
Square, 1½ qt.....per doz., $1 00
Square, 2 qt.....per doz., 1 30
1 qt. reversible .....per doz., 1 60

POTS—FIRE.

Bernz.....each..$3 85
Clayton & Lambert's, each, $4 75@6 25
Gate City.....each.. 6 25
Gem ..... " .. 6 75

POWDER.

See Ammunition.

PRESSES—FRUIT AND JELLY.

Enterprise Manufacturing Co... 25%
Henis .....per doz. $2 10

PRUNERS.

Disston's Pole.....per doz..$7 50
Henry's Improved..per doz..65&10%
Water's Improved. " 70, 10&5%

PULLERS.

Cork.
Modern.....each..$2 60
Quick and Easy..... " .. 2 90
Nail.
Giant.....per doz..$9 00@10 50
Giant Pattern. " .. 6 00
Tack—Giant .... " .. 60

PULLEYS.

Awning—Jap'd.....40&5% to 35&5%
Clothes Line..... .....20&10%
Hay Fork.
Iron Wheel, 5 in .....per doz..$1 70
Wood Wheel, 6 in ... " .. 1 60
Wood Wheel, 6 in... pass knot..... " .. 1 75
Hot House—Jap'd .....30&5%
Screw..... " .....30&5%
Side..... " .....30&5%
Sash.
Chicago .....per doz..$0 39
Clark's..... " .. 43
Common Sense, 2 in.. " .. 27
" Pattern, 2 in.. " .. 22
Empire..... " .. 24
Ideal..... " .. 24
Ottumwa. ball b'ring " .. 34
Grand Rapids, No. 17 " .. 24
" " No. 11 " .. 25

PUMPS

Pitcher Spout.

Nos.	1	2	3	4
Each.....	$0.98	$1.10	$1.20	$1.45

Spray.
Blizzard.....per doz..$14 25
Cyclone, tin..... " .. 3 90
" copper..... " .. 6 75
Daisy..... " .. 8 75
Little Giant.....each.. 2 40

PUNCHES.

Conductors', No. 22....per doz..$2 50
Machine.....per lb . 19
Saddlers'.
Common.....per doz..60c@70c
Good..... " . 72c@84c
Spring.
1 Tube ..... per doz $2 25

PLATES--TIN.

See Metals in Column 1.

PLIERS.

Button's--In. 4½ 6 8 10
Per doz.....$2.60 $3.10 $3.90 $5.20
Button's Pattern.
In. 4½ 6 8 10
Per doz. $2.35 $2.50 $3.45 $4.40
Cutting.
Cronk's Comb.....per doz..$6 25
Bernard's..... .....30%
Lodi..... .....40&10&5%
Stubb's..... .....50%
4 Tube, revolving.... " .. 5 25
Tinners'.
Hollow..... .....40%
Solid..... .....each..5½c

PUTTY.

In Bladders.
Strictly pure .....per 100 lbs. $2 35
Commercial ..... " " 2 10

RAIL.

Barn Door.
Light Wrought.. .....per ft. 3c
Safety .... " 5½c
Single Flange .... " 1⅞c
Smith's Wro't Bracket—plain 3½c
Smith's Special 4½c
Smith's "Never Jump".....11c 50%
Smith's Plain Steel.....30%
Smith's Milled Steel 4½c
Sliding Door.
Painted iron .....per ft. 4½c
Bronzed wr't iron..... " 8½c

RAKES.

Coal or Road.....per doz. $5.25
Garden.
Steel, braced .....70&10&5%
Steel, bow..... .....70,5,10&5%
Malleable Iron, heavy.....70@10%
Hay—Wood.....per doz. $1 05@1 70
Lawn—Wood.
Common .....per doz. $2
Automatic..... " 6 00
New Lawn Queen .... " 3 60
Jumbo, 36 teeth ..... " 5 75

RASPS—See Files.

REGISTERS.

List Sept. 1, 1901.
White Japanned .....75&10%
Nickle Plated.....75&10%
Copper .....75&10%
Electro Plated Brass 50%

RINGS

and Ringers—Hog.
Blair's Rings .....per doz. 60c
Blair's Ringers ..... " 84c
Brown's Rings..... " 65c
Brown's Ringers..... " 90c
Champion Rings..... " $2 35
Champion Ringers..... " 1 70
Hill's Rings..... " 48c
Hill's Ringers..... "70c@95c
Mazor Rings ..... " 80c
Mazor Ringers ..... " $1 15
Perfect Rings ..... " 84c
Perfect Ringers..... " $1 05
Wolverine Rings..... " 1 50
Wolverine Ringers.... " 70c
Bull.
Copper, 2⅛-in. 3-in.
per doz..... $1 35 $1 70
Steel.....per doz. 95 1 05
Steel, Nickel Pl't'd, 2⅛-in., doz. 1 35
Rea's Self Piercing.. .....$1.95
Fruit Jar—White .....per lb. 30c
Key.
Split, round.....per doz. 1
Split, square ..... " 32c
Ball, round..... " 32c

RIVETS.

and Burrs.
Copper Belt .....50&10&5%
Coppered Iron 75%
Tinners'.....75%
Hame.....per lb.
Slotted Clinch .....per doz. 70c@75c
Tubular—Nos. 1 and 2, assorted sizes.....per doz. 60c

ROPE.

Per lb.
Manila, 7-16 inch diameter and larger..... 11½c "
Sisal, 7-16 in. and larger.. 8½c "
Cotton.
¼ and 5-16-in. on reels...per lb. 12c
¼ and 5-16-in. in coils... " 12½

RULES.

Boxwood.....60%
Ivory .....35&5%

SASH WEIGHTS.

Per ton, f.o.b. Chicago.....$30.00

SAWS.

Back.
Disston's.....25&7½%
Jackson's .....25&7½%
Butchers'—Disston's .....35&7½%
Circular.
Disston's.....50%
Hiles' 50%
Compass.
Common .....per doz. $1 35@1 60
Disston's .....25&7½%
Cross-Cut.
Atkin's..... .....40%
Disston's.....40&10% &50%
Pocahontas Bit.....per ft. 29c
Pocahontas, Blued ..... " 41c
Dehorning.
Atkins'.....per doz. $5 50
Disston's ..... " 5 75
Hack.
Disston's .....25&7½%
Keystone 33⅓%

SAWS—CONTINUED.

Hand and Rip.
Brown's ..... 30&7½%
Disston's No. 7 ..... 30&7½%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120 ..... 25&7½%
Gorham's Comb ..... 30&7½%
Keystone ..... 30&7½%
Sam Sickles', hand...per doz. $4 25
"I Will," hand ..... " 5 75
"I Will," rip ..... " 6 75
"U. S. A." hand ..... " 12 25
"U. S. A." rip ..... " 14 25
Keyhole—Disston's ..... 25&7½%
One Man 50%

Panel.
Brown's ..... 30&7½%
Disston's No. 7 ..... 30&7½%
Disston's Nos. D8 and 12, D100 and 112 ..... 25&7½%
"I Will" 40%
"U. S. A." ..... 40&10&5%

Pruning.
Avery's Duplex ..... 25&7½%
Brown's ..... 25&7½%
Disston's ..... 25&7½%

Wood.
Common ..... per doz. $4 50
Handy ..... " 7 50
Happy Medium ..... " 7 00
Wood Sawyers' Delight " 8 25

SAW SETS.

Common Lever ..... per doz. $ 1.20
Stillman's Lever ..... per doz. 1.30
Leach's ..... per doz. 5.00
Nash's ..... per doz. 4.20
Monarch ..... per doz. 6.50
Aikin's Pattern ..... per doz. 3.50

FRAMES—SAW.

Common, plain ..... per doz. $1 20
" painted ..... " 1 60

SCALES.

Counter.
Fairbank's Standard 40%
Hatch's ..... per doz. $21 50
Little Detective, 1 2 6
Each $1 65 1 85 1 80
No. 1 Tea ..... per doz. 7 75
Union Platform ..... each 2 35
Pelouze 25%
Turnbull's Market 50%

Platform.
Common, 600 800 1000
Each $8 75 9 75 10 75
Chicago Standard ..... 33⅓% & 40%
Fairbank's Standard 40%

SCOOPS.

Ames ..... 10&10%
Eastern Pattern. Socket Strap.
Nos. 2 3 4 5 6
Per doz. $7.00 7.25 7.50 7.75 8.00
Nos. 7 8 9 10 12
Per doz. $8.25 8.50 8.75 9.00 9.50
Western Pattern. Socket Strap.
Nos. 1 2 3 4 5
Per doz. $7.00 7.25 7.50 7.75 8.00
Ajax. *Eastern Pattern,*
Nos. 2 3 4 5
Per doz. $5.25 5.50 5.75 6.00
Nos. 6 7 8 9
Per doz. $6.25 6.50 6.75 7.00
Ajax. *Eastern Pattern,* extra heavy,
Nos. 3 5 6 7
Per doz. $7.25 7.75 8.00 8.25
Ajax. *Western Pattern,*
Nos. 4 5 6 7
Per doz. $5.75 6.00 6.25 6.50
Nos. 8 9 10 12
Per doz. $6.75 7.00 7.25 7.75

SCRAPERS.

Box.
Stanley's Adjustable, per doz. $3 60
Triangular ..... " 2 10
Cabinet.
Ajax ..... per doz. $2 25
Cast Steel ..... " 65c@75c
Stanley's No. 80 ..... " $7 75
Road.
Cubic ft. 7 5 3
Without runners, ea. $5.00 4.75 4.50
With runners .... " 5.25 5.00 4.75

SCREWS.

Bench.
Iron 30%
Wood, white maple ..... per doz. $3 60
Hand—Wood 20%
Hand Rail ..... 70&10%
Jack ..... 75&5%
Lag or Coach, Gimlet Point..70&10%
Saw—Centennial.
Nos. 1 2 3 4
Per doz. 22c 25c 32c 36c
Wood.
F. H. Bright Steel ..... 87½&10%
R. H. Blued Steel ..... 85&5%
F. H. Jap'd Steel ..... 82½&5%
F. H. Brass ..... 85&5%
R. H. Brass ..... 80&5%
R. H. Nickel Plated 75%

SCYTHES.

Clipper, grain ..... per doz. $9 25
Dutchman, grass ..... " 6 00
Golden Clipper, grass ..... " 5 50
U. S. A., grass ..... " 7 00

SETS.

Nail.
Round, common ..... per doz. $0 33
Square " ..... " 42
Octagon " ..... " 33
Square, Buck Bros. ..... " 1 25
Cup Point, knurled, pr doz. 70c@90c
Rivet.
Farmers' ..... per doz. $1 45
Tinners' ..... 50&10%
Saw.
Aiken's Pattern ..... per doz. $3 50
Common Lever ..... " 1 20
Disston's Monarch ..... " 6 50
" X Cut ..... " 11 75
German ..... " 1 35
Morrill's Old Style ..... " 5 00
" Pattern ..... " 4 50
Leach's ..... " 4 80
Nash's Hand ..... " 4 00
" X Cut ..... " 5 50
Stillman's Lever ..... " 1 30
" X Cut ..... " 2 50

SHARPENERS—SKATE.

Diamond ..... per doz. $1 60

SHAVES—SPOKE.

Iron ..... per doz. $1 35@$2 75
Wood ..... " 2 75@ 4 75
Bailey's ..... 50&5%
Goodell's 15%
Stanley's Universal ..... 30&5%

SHEARS.

Pruning.
Buckeye, No. 1 ..... per doz. $6 50
" No. 2 ..... " 8 50
California Pat., 9 in. ..... " 4 25
" 10 in. ..... " 5 00
Draw Cut, No. 3 ..... " 15 50
" No. 4 ..... " 18 50
Henry's Pat. 0 01 14 012
Per doz. $1.90 $2.50 $3.15 $3.50
Star ..... per doz. $4 75
Sheep—No. BBA. 6 in. 6½ in. 7 in.
Reg. Grip. $11.00 $11.35 $12.00 doz.
Nar. Grip. 11.20 11.00 12.15
Tinners'—See Snips.

SHEAVES—SLIDING DOOR.

In. 3 4 5
Common..Per set..$0.42 $0.48 $0.70
Hatfield's. " .. .75 1.00 1.60

SHELLERS—CORN.

Union ..... per doz. $7 25

SHOT—See Ammunition.

SHOVELS AND SPADES.

Railroad, Etc.
Gold Hibbard's ..... per doz. $9 25
C. H. Conovers's ..... " 7 75
Beckwith's ..... " 7 75
Hickory ..... " 6 25
Greenleaf's ..... " 5 75
Columbus ..... " 5 00
Ames' new list ..... Discount 12½%
Coal.
No. 2 Ajax ..... per doz. $5 25
No. 4 Golds ..... " 6 25
Ames' new list ..... Discount 12½%

SIEVES.

Champion ..... per doz. $1.00
Hunter's Genuine ..... " 1.20
" Imitation ..... " 1.00
Tin Rim, 16 mesh plain wire" 1.35
Wood " 16 mesh plain wire" 1.00

SINKS.

Cast Iron.
Painted 50%
Enameled, White ..... 60&10%
Wrought Steel.
Painted, new list ..... 40-10&5%

SLEDGES—See Hammers.

SNAPS—HARNESS.

Champion 65%
German Pattern ..... 30&5%
Judd's Pattern ..... 60&10%@70%

SNATHS.

Double Ring, Bush ..... per doz. $6 50
Patent Loop " ..... " 7 00
" " Brass ..... " 6 25

SNIPS—TINNERS'.

Hernisch's ..... 40&5%
National ..... 40&5%
P. S. & W. Co.'s ..... 25&5%

SOLDER.

See Metals, Column 1

SPRINGS—DOOR.

Perfect. Nos. 1 2 3 4
Per doz. 32c 38c 45c 48c
Reliance, Light $1.40, Heavy $2.20 doz.
Star ..... " .90, " 1.30 "
Torrey's ..... per doz. $1 35
Warner's— No. 1 No. 2
Per doz. 72c $1 45

SQUARES

Steel and Iron 70%
(Add for Bluing, $2.50 per doz., net.)
Mitre—Stanley's No. 12 ..... 40%
Try.
Stanley's No. 20, new list...30&10%
" Nos. 12 and 14 ..... 40%
Try and Bevel—Stanley's ..... 40&5%
Try and Miter.
Fox's ..... per doz. $7 25
Winterbottom's 50%

SQUEEZERS—LEMON.

Common Wood ..... per doz. $0 72
Porcelain Lined, wood ..... " 1 30
Boss, tinned iron ..... " 84
Pearl, nickel plated ..... " 1 30
Star " ..... " 1 60
Little Giant, tin'd iron ..... " 4 25
King ..... " 2 50
Drum ..... " 4 50

STAPLES.

Blind—Barbed ..... per lb. 9¼@10c
Butter Tub ..... " 8@8½c
Fence, less than carload.
Polished ..... per 100 lb. $2 40
Galvanized ..... " 2 80
Netting—Galvanized ..... per keg 3 60
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples ..... 85-10&5%
Extra heavy ..... 75&10%

STEELYARDS.

Discount 25%

STONES.

Axe.
Hindostan ..... per lb. 5¾@7c
More Grit ..... " 9¼c
Washita ..... " 16½c
Emery ..... 60%@60&5%
Oil—Unmounted.
Arkansas Hard ..... per lb. $2 00
Arkansas Soft ..... " 1 15
Hindostan ..... " 6¼@6¾
Lily White ..... per lb 43c
Queer Creek ..... " 14½c
Ouachita ..... " 36c
Washita ..... " 25c
Sythe.
Black Diamond ..... per gro. $7 75
Clear Grit ..... " 4 25
Gem Corundum ..... " 7 50
Green Mountain ..... " 4 20
La Moille ..... " 7 00
Pikes Gen. No. 1, Ind. Pond., per gro 4 75
White Mountain ..... per gro. 6 50
Willoughby Lake .... " 6 25
Red End ..... " 3 15

STOPS—BENCH.

Hotchkiss' ..... per doz. $3 60

STOPPERS—FLUE.

Common ..... per doz. 42c
Crown ..... " 48c
Gem, flat, painted ..... " 72c
Gem, cor'd, decorated .... " 68c
Kirch's ..... " $1 20
Peerless ..... " 72c
Skinner's Common Sense " 95c

STRAPS.

Scoop ..... per doz. prs. $1 80
Skate ..... " 60@70c

STRETCHERS.

Carpet.
Bullard's ..... per doz. $3 90
Excelsior ..... " 5 50
Malleable Iron ..... " 70
Perfection ..... " 6 00
Sitterly's ..... " 4 50
Wire.
N. S. Elwood's ..... per doz. $5 75
O. S. Elwood's ..... " 5 75
Little Giant ..... " 5 50
Star Lever ..... " 6 25
Star Tackle Block .... " 9 25
Warner's ..... " 6 25

SWIVELS.

Malleable Iron ..... per lb. 6½c
Wrought Steel ..... per gro. $4 50

TACKS.

American Cut ..... 90&5%
American Wire ..... 85&25&10%
Bill Posters Cut ..... 90&40%
Blued Carpet ..... 90&15%
Tinned Carpet ..... 90&15%
Gimp ..... 90&30&10%
Upholsters' Cut ..... 90&40&5%
Upholsters' Wire ..... 90&25%
Double Pointed ..... 90&20%
Copper ..... per lb. 27c
Canvas Nails ..... 75&5%
Clout Nails ..... 75&10&5%
Hungarian Nails ..... 80&5%

TAPES—MEASURING.

Asses' Skin ..... 40&10%
Bend Leather 25%
Patent Leather 25%
Lufkin's Steel 30%
Lufkins Metallic 30%

TENTS AND PAULINS.

Wall Tents ..... 50&20&10%
Wedge Tents ..... 50&10&5
Paulins ..... 50&10&5%
Wagon Covers ..... 50&10&5%

THERMOMETERS.

Tin Case ..... per doz., 95c@$1 25
Wood Back ..... " $1 75@ 9 00
Glass ..... " 15 50

TIES.

Bale.
Single Loop ..... 80&10&5%
All other kinds 70%
Cow—See "Chains."

TONGS.

Crimping—Packham's ..... per pair 50c
Gutter—P. S. & W. Co.'s ..... 15&10%
Pipe—Brown's 50%
Roofing—P. S. & W. Co.'s .... 15&10%

TOOLS—SAW.

Atkin's Dexter ..... per doz. $4 25
Atkin's Excelsior ..... " 6 25
Disston's Universal 40%
McDonald's 33⅓%
Simond's Crescent ..... per doz. $10.00

TRAPS.

Game.
Hawley & Norton 70%
Newhouse 50%
New Victor 80%
Mole—Reddicks ..... per doz. $5 75
Mouse and Rat.
Wood Choker ..... per hole 10c
Tin Choker ..... " 11c
Delusion ..... per doz. 85c
Imitation Sight, Rat .. " 80c
Marty Rat ..... " $6 75
Marty Rat, Imitation .. " 3 75
Marty Mouse ..... " 3 15
Marty Mouse, Imitation " 2 10
E-Z-Ketch, Mouse ..... " 42c
E-Z-Ketch, Rat ..... " 90c
French Automatic ..... each $3 60
Fly.
Balloon ..... per doz. $1 25
Harper's ..... " 1 35

TROUGH—EAVE.

Eastern ..... Discount 80&5%
Central ..... " 80%
South Western .... " 75-10%
Missouri River .... " 80%
Southern ..... " 75-10&2½%

TROWELS.

Brick.
Standard 30%
Brade's ..... 10&7½%
Disston's 30%
Rose's 25%
Plasterers'.
Standard 33⅓%
Disston's 30%
W. & McP 25%

TRUCKS.

Bags ..... each $1 70
Handy ..... " 1 50
Warehouse ..... 60&5%

WASH-BOARDS.

No. 1 2 3
Half Ironed $2.60 $3.40 $5.00
Full Ironed 3.90 5.75 6.75

TUBS-WASH.

No. 3 2 1 Ex. large
Standard, per doz. $5.25 6.25 7.25 9.75
Dowel .... " 5.60 6.60 7.50 10.00
Cedar .... " 6.50 7.50 8.25
Indurated. " 7.20 7.95 9.45 11.70
Galvanized.
No. 1 2 3
Per doz $5.75 6.25 7.00

VISES.

Bonney's 30%
Cheney's 20%
Parker's Oval Slide ..... 50@50&10%
Parker's Parallel ..... 15@20%
Parker's Victor 30%
Parker's Combination ..... 5% & 10%
Solid Box ..... 50&5%
Adam's Mechanics' ..... each $2 50

WARE,

Cast-Iron Hollow.
Ground ..... 40, 10&2½%
Unground ..... 50, 10&2½%
Extra Finished 40%
White Enameled ..... 40&5%
Maslin Kettles 65%
Enameled.
Adamant, one coat, 70&10%@75&10%
The manufacturers divide this ware into two classes, which take different discounts, noted above.
Chrysolite, three coat ..... 40&5%

WASHERS.

Leather. In. ⅜ 1 1½ 1¾ 1¾
Nut, per C 16c 17c 19c 25c 23c
Collar, per C 35c 40c 40c 43c
Wrought Iron.
In. ¼ 5-16 ⅜ ½ ⅝ ¾ to 1
Per lb. .9c 8c 6¾c 5¼c 5c 4¾c
Wrought Steel.
In. ¼ 5-16 ⅜ ½ ⅝ ¾ to 1
Per lb .10c 9c 7¾c 6¼c 6c 5¾c

WEDGES.

Ax ..... per doz. .30c
Galling ..... per lb. .10¾c
Saw ..... " .. 8¾c
Wood Choppers.
Lake Superior and Oregon, Pat ..... per lb. .9¾c
Reg. Pattern, Steel ... " .. 4 c
Truckee " " ... " .. 4¼c

WEIGHTS.

Hitching ..... per lb 2¾c
Sash—F. O. B. Chicago..pr ton..$28.00

WHEEL BARROWS.

Common Railroad .... per doz. $13 00
Heavy " .... " .. 19 50
Railroad, ball bearing " .. 19 00
Santiago Steel Tray .. " .. 26 50
No. 04 Steel Dirt ... " .. 52 00
No. 04¼ " " ... " .. 56 00

WHEELS.

Corundum ..... 70&10&5
Emery ..... 75&5%
Well. In. 8 10 12 14
Per doz.... $1.90 $2.20 $3.00 $5.50

WIRE.

Barbed. Painted. Galv'd.
Carloads...pr 100 lbs. .$2.50 $2.80
Less than car " .. 2.60 2.90
Brass.
In coils 20%
In 1 lb. spools, new list .... 50& 10%
Broom—Tinned ..... 60&10&10&10%
Cable—Same price as Barbed Wire.
Copper.
In coils ..... 20&10% 33⅓%
In 1 lb. spools, new list .... 50&10%
Fence—Smooth.
Nos. 6 to 9, Annealed, pr 100 lbs. $2.10
Nos. 6 to 9, Galv'd... " 2.20
Hair—New list ..... 50&10%
Market.
Bright, full bdles ..... 70&10%
Bright, broken bdles 70%
Coppered, full bdles 70%
Coppered, broken bdles .... 65&10%
Tinned, full bdles ..... 70&5%
Tinned, broken bdles ..... 65&10%
Picture.
In coils ..... 80%@80&10%
In 5 lb. spools ..... per lb 26c
Plain—Small lots $2.00
Car lots 1.95
Small spools 5c per hundred higher

WRENCHES.

Acme Standard 60%
Alligator ..... 65&5%
Always Ready ..... 40&10&5%
Bemis & Call 40%
Coe's Standard ..... 40&10%
Girard's Agricultural 75%
P. S. & W. Co.'s Agricultural 75%
" " " Knife H'dle. 50&5%
Wescott's "S" 33⅓%
Malleable ..... per lb. 6¼c
Stillson Pipe ..... 60&5%
Trimo " 60%

WRINGERS.

Clothes.
Nos. 22&110, Guarantee, pr doz. $28 00
No. 150, Sunshine ..... " 18 00
No. 130, Mendota ..... " 18 00
No. 13, Success ..... " 10 00
Blue Bell, Ball Bear'g. " 25 00
No. D 110, Domes'ic ... " 22 50
No. E 300, Empress ... " 25 50
No. 122 Bicycle Ball-bearing ..... " 27 50
No. 122, Swan ..... " 27 50

Wants and Sales.

For yearly subscribers to THE AMERICAN ARTISAN will be inserted under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES.

PATENTS HUBERT E. PECK, 623 F St., N. W., Washington, D. C. Consulting Expert in Patent Causes. U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications." Honest work but no "Something for Nothing" offers.

For Sale—A "Sherman" tandem in perfect condition; cheap. T. E. Copalin, 32 No. State st., Chicago, Ill. 16

For Sale—$10,000 stock of hardware, stoves, tinware and paints with a tin and plumbing shop in connection; this stock is in the copper country of Michigan and offers a rare opportunity for some hustler to get a profitable business; the reason I want to sell is that I am going to the Pacific Coast; correspondence solicited. Oscar Keckonen, Calumet, Mich. 16

Wanted—Stock of hardware or lumber for 160-acre farm adjoining county seat town; write for particulars. Address "Farm," care The American Artisan, 69 Dearborn st., Chicago. 16

If you want to buy a hardware, buggy, harness and implement business doing over forty thousand annual business, stock about twelve thousand, and mean business, write "Farmer," care The American Artisan, 69 Dearborn st., Chicago, Ill. Located in garden spot of Indiana. 16

For Sale or Exchange—For stock of hardware that can be moved, modern residence and vacant lot. Edmund Neville Hardware Co., Dixon, Ill. 16

For Sale—A good paying cornice shop, or would take a partner; only a small amount cash necessary to a good, capable and reliable man, who can take charge of shop, get out his own patterns and handle a few men and the business to the best advantage; an up to date live town, 15,000 population. Address Cornice Works, Box 1135, Waterloo, Iowa. 16

For sale—Good tinning business; do slating, roofing and gas fitting, galvanized and furnace work. Reason for selling, death of proprietor. Will sell for whatever stock and tools invoice. Invoices from $1,500 to $1,800. Address Mrs. D. A. Williams, Jefferson, Ohio. 16

For Sale or Exchange—For a stock of hardware, a select North Dakota farm near county seat town. Answer quick. Underwood & McIlvain, Enderlin, N. D. 15

For Sale—A good clean stock of hardware, implements and buggies; invoice about $6,000; in northwestern Illinois. Address R. J. S., care The American Artisan, 69 Dearborn st., Chicago, Ill. 15

For Sale—$3,000 stock of hardware and groceries in a new thriving western town; sheep, cattle and mining trade; a snap for a hustler. For particulars address C. D. Terwilliger, Encampment, Wyo. 14

Wanted—$5,000 for new stock of hardware, buggies, etc., which made $2,000 clear in 1902; good town in northern Illinois. Address "Hick," care The American Artisan, 69 Dearborn st., Chicago, Ill. 14

Wanted—A good location for tin and bicycle shop and small stock of tinware in growing town; Iowa or Nebraska preferred. Address Box 357, care The American Artisan, 69 Dearborn st., Chicago, Ill. 14

For Sale—My hardware, stoves, tinware and tin shop and pump work and cornice work; up-to-date stock; invoices about $6,000 to $7,000; a good paying business in a fine location down town; a fine city in eastern part of Minnesota of 22,000 population; good reason for selling. Address "Good City," care The American Artisan, 69 Dearborn st., Chicago, Ill. 14

For Sale—Two Gem gasoline fire pots; they are in good shape; $3.00 for one, or the two for $5.00; cash with order. Address F. B. Karl, Delaware, Ohio. 14

For Sale—Good clean up-to-date stock of hardware, stoves, etc., in one of the best towns in Northern Iowa; population 5,500; stock and fixtures will invoice about $6,000; best location in town; business will run from $12,000 to $15,000 a year; will take a good improved 80-acre farm located in Northern Iowa or Southern Minnesota in exchange as part payment. Address "Up-to-Date," care The American Artisan, 69 Dearborn st., Chicago, Ill. 14

For Sale—Clean stock of hardware and implements in good northern Iowa town. Address "Iowa Dealer," care The American Artisan, 69 Dearborn st., Chicago, Ill. 13

Wanted—A stock of hardware from $2,500 to $3,500 at once. When writing enclose stamped envelope for reply. Address "M. E.," care The American Artisan, Chicago, Ill. 13

For Sale—A controlling interest in a manufacturing plant; good reasons given for selling. Address "Box 76," care The American Artisan, 69 Dearborn st., Chicago, Ill. 13

For Sale — Hardware and implement stock; invoice $12,000; good location and good trade. For full particulars address "Box 86," care The American Artisan, 69 Dearborn st., Chicago, Ill. 13

Partner Wanted—With small capital in established business; one that understands cornice and furnace work; best location in city. Address Carl Storch, 1906 Broadway, Indianapolis, Ind. 13

For Sale—A good clean stock of hardware, invoice about $2,000, including tinner's tools, in Illinois; good farming district; rent or sell buildings. Address H. B., care The American Artisan, 69 Dearborn st., Chicago, Ill. 13

Partner Wanted — Competent cornice man and slater with $500 to take full charge cornice shop in good location; must be able to do good roofing; good opening to right party; references required. Address "W. H.," care The American Artisan, 69 Dearborn st., Chicago, Ill. 13

TINNERS' TOOLS.

Wanted—Second-hand tinner's tools and machinery; must be in good condition. Write us at once with list of what you have for sale. Address L. D. McQuiston & Co., Monticello, Ark. 16

For Sale—One good set tinner's tools, 20 pieces. Write for prices. C. E. Battles, Cass Lake, Minn. 16

Wanted—Water pipe tapping machine in perfect condition to tap from ½ to 1 inch. Address P. O. Box 184, Lisbon, N. D. 15

Wanted—A good set of tinner's tools, P. S. & W. in case preferred, and three-foot brake. Address 309-8 Ave. E, Cedar Rapids, Ia. 15

Wanted—One Wiring Machine, Crimper, Cornice Brake, Turning Machine, Stove Pipe Folder and 30-inch Stove Pipe Groover. Address Schlater & Co., Canton, Ill. 14

HELP WANTED.

Wanted—Tinner for inside and outside work; steady job the year around to right man. John Felt, Bluffton, O. 16

Wanted—Good all-round tinner to do furnace work, spouting and general shop work; state wages when answering. Address Weiss & Frerest Bros., Nappanee, Ind. 16

Wanted—Experienced stove salesman; complete line of steel ranges, stoves, etc. Liberal commission; exclusive territory. The Baldwin Stove Co., Cleveland, Ohio. 16

Wanted—A tinner or solicitor with $1,000 to buy an interest in a good jobbing shop incorporated for $5,000, in Colorado. If you have the money and mean business answer. Address "Interest," care The American Artisan, 69 Dearborn st., Chicago, Ill. 16

Wanted—Good tinner; German preferred, who knows something about furnace or pump work; inside and outside work; steady job the year round; state wages expected. Address Julius Fiehrman, Central P. O., St. Louis Co., Mo. 16

Help Wanted—At once, good all-around tinner; wages according to ability; steady position. N. Upham, Grafton, N. D. 16

Wanted—Experienced high-grade stove salesman for Iowa. Address "Illinois," care The American Artisan, 69 Dearborn st., Chicago, Ill. 16

Wanted—A good all-round tinner for general job work, with some knowledge of plumbing; will have to help in store when needed; steady job; must be sober. Address, stating experience, Drawer K, Vassar, Mich. 15

Wanted—A good all-around tinner, a good furnace man and one who is willing to help at machinery preferred; steady job; state wages. Address "Willing," care The American Artisan, 69 Dearborn st., Chicago, Ill. 15

Wanted—A good steady man to take charge of tinshop and do such work as is done in a general repair shop; also repair bicycles; a steady man can have a steady job the year round. Address O. J. Williams, New Richmond, Wis. 15

Wanted—Tinner to act as second tinner and pump man in an all-around shop; sober young man with some experience preferred; steady job and good wages; helper furnished most of time. L. A. Fish & Co., Cloquet, Minn. 15

Tinner Wanted—A steady job and good wages to all-round tinner; must understand bicycle repairing, pump, furnace and galvanized iron work; must be a good mechanic, sober and reliable. W. J. & H. D. Powers, Grand Rapids, Minn. 15

Wanted—A tinner who can and is willing to clerk in store, who is a general all round mechanic, such as is needed in country hardware store; good wages and steady job to right man. Address, with references, and state wages wanted, E. W. Peterson & Co., Florence, Wis. 15

Wanted—An experienced clerk in a stove store. Address H. S., 112 South Jefferson st., Dayton, O. 14

Wanted—A good tinner, slater and furnace man; steady work; a good reliable man. Address 207 Court st., Hamilton, O. 14

Wanted—A tinner with some knowledge of furnace work; good job; state wages; give reference. Address J. N. Fryder, Osceola, Wis. 14

Wanted—A good tinner with a knowledge of plumbing and furnace work; must be a steady man; state age, wages wanted, etc., to H. Godfrey & Son, Jonesville, Mich. 14

Wanted—Tin and sheet iron workers; must be first-class on general jobbing and blow pipe work and have some cornice experience. J. C. Distler, Mishawaka, Ind. 14

Wanted—By young tinner, an opportunity to complete the tin trade; am 19 years old; had two years' experience in store and furnace work. Address Lock Box 246, Sheldon, Ia. 14

Wanted—Good tinner; one who is familiar with furnace work; steady work by the year for right man; state wages wanted in first letter. W. E. Bennett, Fond du Lac, Wis. 14

Wanted—Good all-around tinner; married man preferred; one who understands furnace work; no boozers wanted; a good steady man can have work every day of the year for years; state wages wanted. Martin & Kuebler, Viroqua, Wis. 14

Wanted—A first class cornicemaker and cutter; one capable of estimating from plans; must be strictly sober and reliable and trustworthy; to such a man we will allow him to obtain an interest in said business. Mason City Sheet Metal Works, Mason City, Iowa. 14

Wanted—Experienced and competent salesmen to sell the "Eclipse" line of stoves and ranges in Iowa on commission. Territory has been regularly canvassed and line is well known. A good opportunity for a man of ability and energy. Address The Eclipse Stove Co., Mansfield, O. 14

Wanted—A first-class foreman for steel range shop, one perfectly competent to make first-class steel ranges; must be a sober and reliable man in every particular. References required. Address "D. S.," care The American Artisan, 69 Dearborn st., Chicago, Ill. 13

Wanted—A good tinner; one who is able to take care of shop; must be able to do some plumbing; married man preferred; good wages and work the year round, and as long as he wants to stay; rent and living very reasonable. Address Schilling Bros., State Center, Iowa. 13

SITUATIONS WANTED.

Situation Wanted—By a young man 19 years old, speaks German and English, as tinner; 2 years' experience in furnace and pump work; prefer locating in Wisconsin. Address Box 143, Middletown, Wis. 16

Wanted—Position as traveling salesman in Indiana or Illinois for stoves, hardware or some kindred line; twelve years' retail experience. Address "Ex Retail," care The American Artisan, 69 Dearborn st., Chicago, Ill. 16

Wanted—By a young man, a position as second tinner in a country shop. Address A. S. Butler, Bloomfield, Mo. 16

Situation Wanted—By a tinner and plumber of good habits; can do up-to-date work and expect good wages. Address P. O. Box 184, Lisbon, N. D. 15

Situation Wanted—By tinner of 5 years' experience; am steady and willing to work; state wages when writing. B 24, care The American Artisan, 69 Dearborn st., Chicago, Ill. 15

A hardware clerk and bookkeeper of several years experience desires a position in the northern part of Wisconsin. Am young, ambitious and willing to hustle. Have best of references. Address Box 427, Ft. Atkinson, Wis. 15

SPECIAL NOTICES.

FOR SALE

INCORPORATED PLUMBING and HEATING BUSINESS

with over a three years' lease on a fine two-story brick building, with store, flat and basement, size 50x18 ft.; large yard and stable. An ideal location near world's fair; on a first-class business street, convenient to all car lines. Well established and advertised and in good repute with architects and general contractors in St. Louis and vicinity. Also horse, wagon, tools, stock and fixtures, with good-will, etc. (a bonanza), address, ***PLUMBER,*** care of AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2t-16

PRINTING 200 Note Heads and 200 Envelopes, any wording, for $1, 200 Business Cards for 50c. Printing for Farmers, Merchants and everybody. Circ. for stamp.
MOUNT VERNON JOB PRINTERY,
Mt. Vernon, Ill. 2t-16

WANTED

A good pattern cutter and foreman for Cornice shop; state positions previously occupied, experience and salary expected; also whether union or non-union. Address **"PATTERN CUTTER,"**
Care of the American Artisan, 69 Dearborn St., Chicago, Ill. 2t-16

TINNERS

Do you wish to make from $2.00 to $5.00 a day writing letters evenings at home? If so, address with stamp,
ELECTRIC NOVELTY CO.
Winnebago City, Minn.

"If a Blind Man Cannot Smell"

he never pours coal oil into a gasoline lamp or stove, neither does he pour gasoline into a coal oil lamp or stove if he uses J. A. Dawson's patent attachment for oil cans. It is neat, sure and cheap. Will sell the patent or royalty.
J. A. DAWSON, Okarche, O. T. 1t-16

MORTGAGE SALE.

Shop 12x32 feet. About 650 feet from postoffice, in Cripple Creek, Colorado. $150. A No. 1 set of Tinners' Tools $493.50. Ground rent only $3 per month. Can be paid in repairing. Price, $350. For list and particulars, write
C. A. CREEL, 4t-14
118 E. Golden Avenue, Cripple Creek, Colorado.

We want to tell you of the durable and sanitary wall coating and tender the **ALABASTINE** Free service of our artists in helping you work out complete color plans; no glue kalsomine or poisonous wall-paper. Address **ALABASTINE CO., Grand Rapids, Mich. and 105 Water St., N.Y.**

Alleged Equals

Of Sunlight Acetylene Burners cost more. The best American burners, in widest variety, at terms attractive to the hardware trade. Quick shipments.

SUNLIGHT LAVA MFG. CO.
CHATTANOOGA. : : TENN.

STEEL SLEDS

There is not a dealer who reads this advertisement who is not interested in the line we carry. A beautifully illustrated catalogue (in colors)—yours for the asking. You should get posted NOW. You will remember you could not get the sleds you ordered last November and December

Norris & Loring Hardware Co.

Exclusively Wholesale **CEDAR RAPIDS, IOWA**

WANTED!

Superintendent for Chicago Steel Range Factory.

Rare chance for young man of energy and character. Address "SHEETS,"
Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 4t-15

FOR SALE Hardware business long established; an exceptional chance; located central N. Y. in fine mfg. city of 40,000 people. Will reduce stock to suit purchaser. Write for particulars. Ad. Hardware Company, care The American Artisan, 69 Dearborn St., Chicago, Ill.

I WOULD LIKE to have a good sheet iron worker in each town in the U. S. manufacture for me a patent article to supply the trade in his town and neighborhood. Device made of Galvanized Iron; can be built in any good sized tin shop; good demand for it; good profit in making it; can be worked into a good business. Address, 10
R. M., P. O. Box 333, Milwaukee, Wis.

FOR SALE.

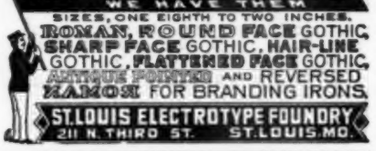
PATENT.

Entire patent or part interest of the best oven thermometer ever made. Thoroughly tested for years. It outlasts any stove, after which you can put it on a new stove still as good as new. It opens a register when oven is overheated to admit cold air, and closes it gradually when heat decreases. Not expensive, nor expensive machinery required to manufacture it. Parties interested are requested to communicate with THE LOUIS DUEMER PATTERN WORKS, Hamilton, Ohio. 4t-14

HOMESEEKERS EXCURSIONS
On FIRST and THIRD TUESDAYS in each Month to **VIRGINIA**
Via NORFOLK & WESTERN RAILWAY

For all information as to Rates and Tickets and for LAND PAMPHLETS and descriptive matter, address
ALLEN HULL, D. P. Agt., Columbus, Ohio

SEE THAT PEERLESS TIE?
PEERLESS WOVEN WIRE FIELD FENCE
POULTRY & GARDEN FENCE, ACME MATTING
LAWN AND CEMETERY FENCE, GATES
PORTABLE CORN CRIBS, ETC. ETC
THE DENNING FENCE WORKS
CEDAR RAPIDS, IOWA



Manufacturer of King Carpet Stretcher, Tack Hammer, Tack Puller, Mincing Knife, Carpet Beater, Clothes Line Holder, Broom Holder, Tea Pot Knobs, Etc.

Sitterly Novelty Works, Auburn, N. Y.

Advertising is the root of all money.

FOR those small repairs which every dealer has to make upon stoves nothing better has ever been found than Dixon's Stove Cement. It makes a strong, firm, durable repair. Ask for booklet 18-L.

JOSEPH DIXON CRUCIBLE COMPANY, JERSEY CITY, N. J.

J. H. ELLER & Co.
MANUFACTURERS OF
METAL CEILINGS
CORNICE, SKYLIGHTS, VENTILATORS ETC.
SHEET METAL SPECIALTIES.
1106 E. 5 ST. CANTON, OHIO

Metal Worker's Crayon.
THE D.M.STEWARD MFG.CO.
UNIFORM DISCOUNT TO THE TRADE.
D. M. STEWARD MFG. CO.
CHICAGO, CHATTANOOGA. NEW YORK

A Trial
will convince you that "CANTON" Metal Ceilings give the largest profits on a job, because they are easiest to apply, and require the least labor to erect. No altering the work on account of bad alignment. No calking of joints because of poor beads. Made in a large variety of beautiful classified designs. Are best "because the construction is right." You need our Art Metal Catalog F. It's yours for a postal.
METAL CANTON CEILINGS
The Canton Steel Roofing Co.
Canton, O.
NEW YORK OFFICE:
157 W. 23d St.

WRITE US FOR CATALOGUE AND LOW PRICES ON BEST
STEEL ROOFING, CORRUGATED IRON, ETC.,
We are large manufacturers of these goods and can save you money.
SYKES STEEL ROOFING CO. CHICAGO, ILL. and NILES, OHIO

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Is a plate of superior quality that has been tried repeatedly and is now used daily, giving universal satisfaction. It carries all of 25 pounds of coating to the box, is stamped and resquared. We have it—no one else. Buy a box and be convinced of its merits.
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ROOFING TIN
MADE BY THE MF PROCESS.
The MF PROCESS of manufacturing roofing tin originated in South Wales two generations ago; from that time to the present the product of the MF PROCESS has been the most reliable and hence the MOST FAVORED.
Recently the NEW METHOD by which terne plates are finished in a manner that gives further protection against corrosion has been combined with the MF PROCESS. The result of this combination is the U. S. EAGLE N. M.
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How do these handsome Rococo plates impress you? Don't you think a ceiling of this material, with mouldings, borders, and cornices to match would make something pretty showy?

We have such a big variety of patterns for ceiling material we can furnish most anything you want, deep stamped or shallow, plain or ornamental, for large rooms or small, for high or low ceilings—tell us your needs and we can give you something appropriate and artistic at the right price.

Give us a chance to prove the statement. Write us TO-DAY about it.

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	Cond. Pipe		(all kinds)	
	(Rd. and Sq.)		Corrugated Iron	
	Elbows		Curved Iron	
	Hangers		Crimped Iron	
	Cor. Cut-Offs		Brick Siding	
	Pat. 11-14-99		Rock Face	
	Cond. Hooks		Beaded Iron	
	Trimmings		Metal Shingles	

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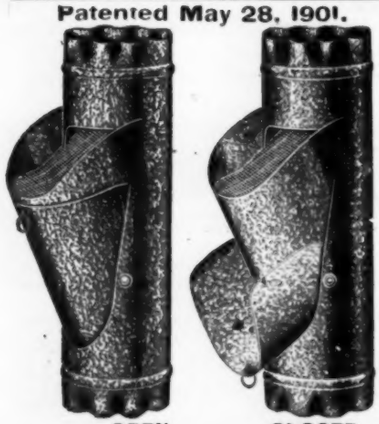

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Young's Combination Strainer and Cut-Off

FOR BOTH CORRUGATED AND PLAIN PIPE

IT has a body made of one piece, therefore cannot break apart; has no lever or springs to break off; has all parts riveted and soldered, too; is practically indestructible. } **NEATEST SIMPLEST STRONGEST BEST**

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E. C. Armstrong & Co., Clinton, Iowa.
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J. L. Perkins & Co., Chicago, Ill.
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C. T. Schmidt Hdwe. Co., Burlington, Iowa.
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Lincoln Hdwe. Co., Lincoln, Neb.
Brown-Hurley Hdwe. Co., Des Moines, Iowa.
Norris & Loring Hdwe. Co., Cedar Rapids, Iowa.
Cutler Hdwe. Co., Waterloo, Iowa.
Prusia Hdwe. Co., Fort Dodge, Iowa.
A. J. Harwi Hdwe. Co., Atchison, Kans.
Van Camp Hdwe. & Iron Co., Indianapolis, Ind.
Townley Stove Co., Terre Haute, Ind.
Knapp & Spencer Co., Sioux City, Iowa.
Hackett, Walther, Gates Co., St. Paul, Minn.
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Biddle Purchasing Co., Pittsburg, Pa.
Fletcher Hdwe. Co., Detroit, Mich.

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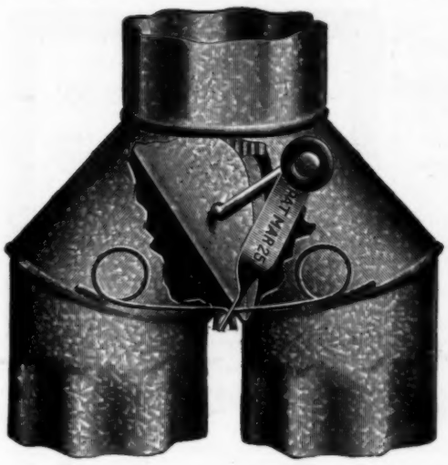

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Simplicity—Strength—Durability

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from the unhealthy condition of close and overheated rooms. It keeps the atmosphere in a residence, cool and refreshing during the hot summer months.

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Eave Trough	Steel Roofing	
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(Rd. and Sq.)	Corrugated Iron	
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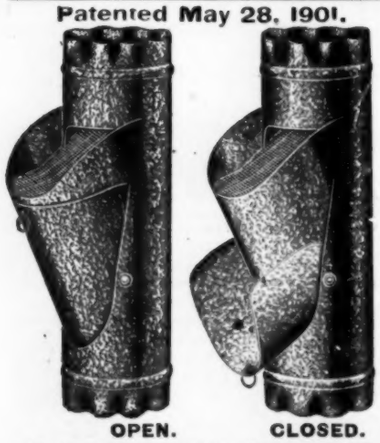

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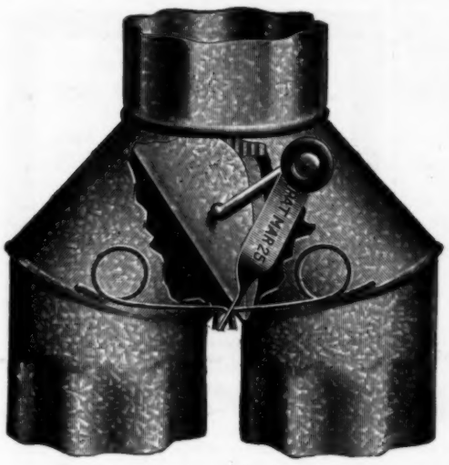

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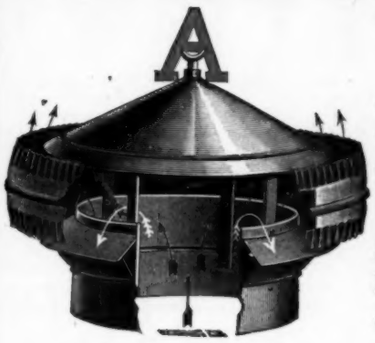

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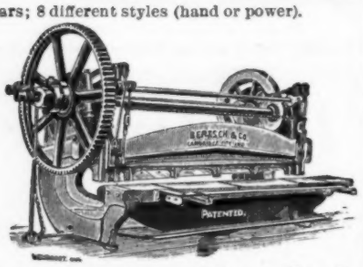

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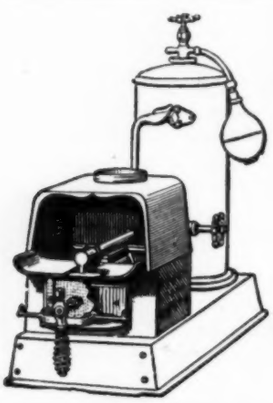

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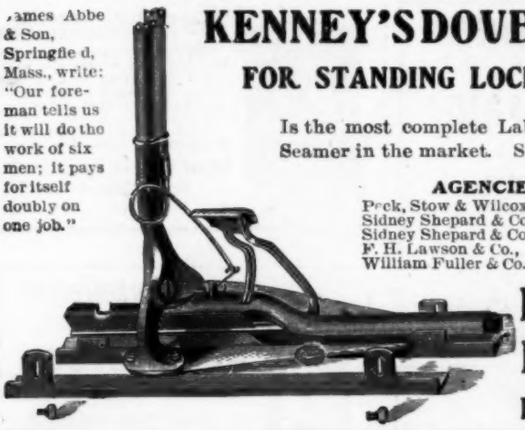

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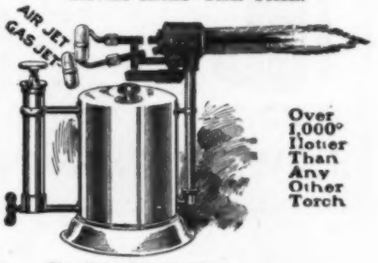

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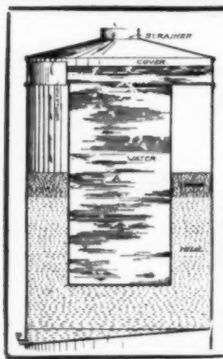

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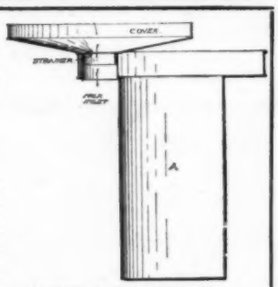

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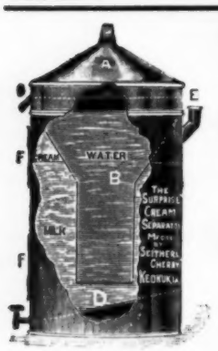

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Great progress has been made in building typewriters in the last three years, greater advances than in all the time previous. Years of experience have shown what was valuable and desirable and what should be sacrificed. Some typewriters do good work and are durable, yet are hard to operate and are cumbersome; others are too complicated and easily get out of order, do not keep alignment, etc.

Operators who have used The Fox Typewriter are unanimous in agreeing that it combines more desirable features than any writing machine yet produced. It is a basket type machine, with ball bearing carriage, two oz. key tension, half inch key dip aluminum finger levers with individual tension, adjustable typebars—insuring perfect alignment even after years of service, line lock, automatic line spacer, and automatic ribbon movement, combining the features that give durability with the lightest touch, easiest action and most simple construction.

Our 1903 catalogue tells all about it and will be sent for the asking. Our free trial plan enables anyone, anywhere, to try "THE FOX" for ten days. Write us to-day about it. FOX TYPEWRITER CO., LTD., 454 FRONT ST., GRAND RAPIDS, MICH.

Nowadays, most merchants want something with a business ring to it. Business doesn't merely happen—something must cause it.

Our trade mark on a piece of Enameled Steelware or Tinware not only insures quick and easy selling, but increases a merchant's list of customers.

Our line is the most complete in all the world. It is the highest in quality. To try to find something better is a useless task.
No trouble at all to get our catalogues and prices. Simply write our nearest office, asking for them.

NATIONAL ENAMELING & STAMPING CO.

NEW YORK BALTIMORE CHICAGO
ST. LOUIS NEW ORLEANS
MILWAUKEE

"This is the Cooker with the whistle that calls the Cook and is the Cook's delight."

"IDEAL" Steam Cookers Lead the World.

Entire meal can be cooked over one burner—Any kind of stove. Reduces fuel bills 50 per cent. Made of the finest one and 2x charcoal tin plate, with heavy pressed copper seamless bottoms.

SUPERIOR TO ANY OTHER In the following Important Particulars:

It has a Steam Tight Cover that prevents the steam and odors from escaping, without any kind of rubber packing or any useless machinery. It has a Steam Whistle that can be heard in almost every part of the house fifteen minutes before the water is exhausted.

A whole dinner can be put on at once, covered up and let alone until ready to serve. All the nutriment, richness and flavor of the food is retained. It saves the labor of watching.

Burning, scorching, smoking, or over-cooking is impossible. It never boils over.

Four pounds of meat or poultry cooked in the cooker are equal to five pounds cooked in the ordinary way, as there is no shrinkage.

Bad cooking or scorching victuals are impossible. It saves fuel, saves worry, and cooks perfectly.

We also make a fine line of Milk Sterilizers, Ideal Clothes Racks, Hat and Coat Racks, Vapor Bath Cabinets, etc.

SEND FOR OUR ILLUSTRATED CATALOGUE WITH PRICES.

THE TOLEDO COOKER CO., 2328 to 2334 ALBION STREET, **Toledo, Ohio.**

DO YOU WANT THE BEST?

GUARANTEED FULL WEIGHT COPPER WASH BOILERS

Did you ever inspect your Copper Wash Boilers to see if they are full weight?

Our 16-oz. No 8 Copper Wash Boilers weigh 7 lbs. each, without cover.

Our 16-oz, No. 9 Copper Wash Boilers weigh 8¼ lbs. each, without cover.

Our 18-oz. No. 8 Copper Wash Boilers weigh 8 2-5 lbs each, without cover

Our 18-oz. No. 9 Copper Wash Boilers weigh 9¼ lbs. each, without cover,

We furnish these with stamped or pieced cover, plain or royal handle, and pack them ¼-doz. to the package, ready for reshipping We make the 12 and 14-oz. also.

Try a sample lot and allow your salesman to use above weights and good results will follow.

No traveling salesmen represent us on the road. Buy direct from the factory and save money. Prices and catalogue on application.

STUBER & KUCK, Peoria, Ill.

ONCE TRIED, ALWAYS USED.

THE BAR-KEEPER'S "FRIEND"

FOR SCOURING, CLEANING AND POLISHING

BAR FIXTURES, DRAIN BOARDS AND ALL **Tin, Zinc, Brass, Copper, Nickel and all Kitchen and Plated Utensils. Glass, Wood, Marble, Porcelain, Etc.**

GEORGE WM. HOFFMAN, SOLE MANUFACTURER AND PROPRIETOR, 295 EAST WASHINGTON ST., INDIANAPOLIS.

THE BAR-KEEPERS' FRIEND.

BARKEEPER'S FRIEND.

Marble, Glass, Nickel, Brass, Copper, Tin and German Silver

can all be cleaned and polished with it easier than with anything else.

Price 25c per lb.

Let us send you a **free sample.**

GEO. WM. HOFFMAN,
295 E. Washington St.,
INDIANAPOLIS, - IND.

FOR SALE BY JOBBING TRADE.

REPAIRS FOR ALL STOVES AND FURNACES

Stove Rods, Paste, Stove Putty.
Stove Knobs, Pipe Dampers, Mica, Etc.

Wm. T. Dust Co., Detroit.

REPAIRS

FOR ALL STOVES AND RANGES.

A. G. BRAUER, 316-318 NORTH THIRD ST. ST. LOUIS MO.

Champion Stove Clay

The only Stove Lining made of crucible materials.
Packed in 2½ lb., 6 lb. and 10 lb. pasteboard boxes and also in bulk.
Order it from your jobber.
The best and most refractory lining made.

Bridgeport Crucible Co.
BRIDGEPORT, CONN.

UNCLE SAM DAMPER! THE PIONEER STEEL DAMPER

FURNACE PIPE DAMPER.

The handle is enameled wood, will not heat, rigidly clamped and cannot come off. The spring is not affected by heat. The stem is a steel rod, all one piece and nothing to fall apart; pointed and easily driven through the pipe. The Damper Plate is made of cold rolled pickled steel, corrugated to stiffen it and to prevent warping. We call special attention to lightness and strength of these Dampers and their desirability for **FURNACE** pipes.

"The Difference in Weight Pays the Freight."

Ask Your Jobber for the "UNCLE SAM."

SAYRE STAMPING CO., Sole Manufacturers, **SAYRE, PA.**

FLEMING BROS., ARMSTRONG, IA., ... WRITE:

"Please discontinue our ad. for a tinner in your valuable paper. We are getting applications from tinners every day, but have secured one by the ad. in THE AMERICAN ARTISAN."

DO YOU WANT **STOVES AND HEATERS** that are easily sold and STAY SOLD. We have been very successful in designing patterns for such.

The Gobeille Pattern Co.
CLEVELAND, OHIO.

The **GEO. W. COPE STOVE PATTERN WORKS**
Cor. Brush & Woodbridge Sts.
DETROIT, MICH.

Weller Stove Pattern Co.
1110-1112-1114 State St.
QUINCY, ILL.

The Milwaukee Pattern Works
Sketches and Designs for
STOVE AND HEATER WORK OF ALL KINDS.
Correspondence Solicited.
505-507 Cedar Street. MILWAUKEE, WIS.

WE MAKE ALL KINDS OF
Metal Patterns
With our experience, facilities and skill, we can produce anything in our line.
C. E. Wenzel Co. 313 Market St., Newark, N. J.

A WONDERFUL INSTRUCTOR.

I want every hardware dealer to handle The Key to The Steel Square. It is of metal, 4x4 inches. It tells what figures to use on the Steel Square for all of the cuts and bevels for common rafters, jacks, hips and valleys for octagon and square roofs. It gives their lengths from 1 to 24 inch rise per foot run. It tells what figures to use to frame to any degree. Complete with instructions and morocco case. Every carpenter wants it and most all will buy it. Retail price, $1.50. Write for trade price. Albert W. Woods, Arch't, Lincoln, Neb.

THE YANKEE (IMPROVED ALL STEEL) DAMPER.

HOT AIR.

THE YANKEE EXCELS.

Above All—Cheapness—a dealer cannot possibly make dampers as cheaply as we sell the Yankee. Easily put in and taken out of pipes. Stiffest, quickest-working and neatest damper on the market.

It is impossible for this rod when in position to move either way.

ROD POINTS: Has wood enameled handle. Wood handle cannot come off. Washer and spring cannot fall off the rod. Same size of holes are punched on each side of pipe. Rod is made of ¼ in. cold-rolled steel and slips into damper very smoothly. **Sample sent to any Dealer without charge.**

SMOKE PIPE.

The S. M. HOWES CO., Manufacturers, 40-46 Union St., Boston, Mass.

EVIDENCE OF SUPERIORITY

The
John Scott Legacy Premium
and Medal

ISSUED BY THE

FRANKLIN INSTITUTE

HAS BEEN AWARDED TO THE

"STAR" VENTILATOR

A Valuable and Unique Prize for Superior Merit

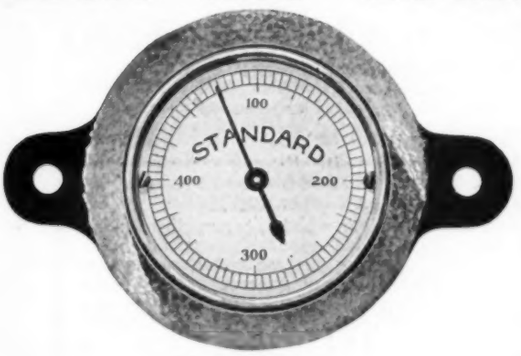
PHILADELPHIA—NEW YORK

MERCHANT & CO., NC., Gold Manufacturers.

CHICAGO—BROOKLYN

Hear What the Trade Say

"The Standard Thermometer Is a great improvement in range doors."



No. 460.

Equip Your Range Doors Now and keep IN LINE of march.

HELIOS-UPTON CO., PEABODY, MASS.

or **Henry Gleason,** Agent, 258 Broadway, N. Y.

THE ACME OVEN THERMOMETER

STYLE "A"

3-INCH DIAL.

The steadily increasing demand for the ACME THERMOMETER is a confirmation of the fact that the best qualities work their way into general use.

You Run No Risk.
We Guarantee Every Thermometer.

MANUFACTURED BY

EVANS STAMPING & PLATING CO.

TAUNTON, MASS.

C. H. MATTHEWS, Western Agent, DETROIT, MICH.

JOHN H. ROBERTS,

Writes: "I consider **The American Artisan** a great help to any tinner or any man in business."

MUNHALL, PA.

NICKEL PLATING OUTFITS.

SEND FOR CATALOGUE OF
NICKEL & ELECTRO PLATING
SUPPLIES & POLISHING MATERIALS

ZUCKER & LEVETT & LOEB CO.
OFFICES. 526, 528, & 530 W. 25TH ST.
NEW YORK. U.S.A.

CROWN VENTILATOR CO. MILWAUKEE

CROWN VENTILATORS

DIFFERENT FROM ALL OTHERS
NONE BETTER FOR GENERAL VENTILATING WORK
ALSO
Crown Chimney Jacks
The CHEAPEST EFFECTIVE
SMOKEY CHIMNEY CURE MADE.
Write for particulars and how we furnish these caps, to
CROWN VENTILATOR CO., MILWAUKEE, WIS.

Faith in Advertising.

WITHOUT newspaper announcements no man who has commodities to sell or services to render can achieve as high a degree of success in business as he could with judicious advertising; and the success which newspaper publicity brings is worth many times its cost. A leading merchant of Syracuse (New York) says: "Most of the owners of large mercantile establishments who use newspaper space had their start under the same conditions that nine-tenths of the small merchants work under. They have had faith in advertising and the courage to buy space."

Established 1874.

The largest and most reliable **Foundry Supply House** in the world.

THE
S. Obermayer Co.,
CINCINNATI, OHIO,
CHICAGO, ILL.
manufacturers
"Everything You Need In Your Foundry."
Importers and refiners
PLUMBAGO GRAPHITE.
Catalog Sent on Application.

THE POPULAR

OCEAN WAVE WASHERS

Once Sold They NEVER Come Back

"BECAUSE" THEY WASH CLEAN

Write for Prices and Exclusive Agency.

LIGHT RUNNING

HANDSOME

WELL MADE

ADJUSTABLE

for HIGH or LOW

SPEED

Sold only to One Dealer in Each Town.

Two Thousand Established Exclusive Agencies

VOSS BROS. MFG. CO. - - - Davenport, Iowa

MENTION THIS PAPER.

Peoria Washing Machines.

BEST IN THE MARKET.
MADE WITH BALL-BEARINGS.

Have a Compound Lever Handle which greatly reduces the work of wash days. The motion used in vibrating the handle takes the strain from the back and lets the arms do the work with a great reduction in labor.
Send for Catalogue.
Secure the Agency.

CLARK, QUIEN & MORSE,
PEORIA, ILL.

BOWL.

Largest and Best Equipped Factory in the South for the Manufacture of

SAD IRONS, Country and Stove HOLLOW WARE, Ground and Unground; SUGAR KETTLES, ENGLISH POTS, Castiron SHOE LASTS and STANDS, KITCHEN and CORNER SINKS, GRATES, ETC.

REVERSIBLE CAST IRON SHOE LASTS AND STANDS.

WHY NOT WRITE FOR OUR CATALOGUE? It cannot fail to prove of interest and value to you

ECCENTRIC STOVE KETTLE.

Blacklock Foundry
SOUTH PITTSBURG, TENN.

WHITE LILY WASHER

HIGH SPEED. LIGHT RUNNING.

Sold direct from manufacturers to dealers.
Only one dealer in each town.

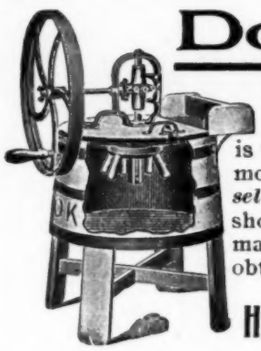
SEND US A TRIAL ORDER.

WHITE LILY WASHER CO.

TOLEDO, OHIO. DAVENPORT, IOWA.
SAN FRANCISCO, CAL.

White Lily Washers Wash Lily White.

Do You Know



That the **O. K. WASHING MACHINE** is the best made, the lightest running and the most attractive washer on the market? *Are you selling it? If not, why?* Every first-class dealer should sell it, because it is made of the best materials, by the best mechanics that can be obtained, and every one sold will sell another.

Write us for Circulars and Prices.

H. F. BRAMMER MFG. CO. Dept. B. DAVENPORT, IOWA

H. WEISS & CO.

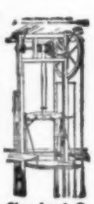
20 Cliff St., New York.

SKYLIGHT GEARING AND CHAIN LIFTS

Tinsmiths' and Plumbers' Tools
Cornice Makers' Tools
Coppersmiths' Tools
Pipe Threading Machines
Second-hand goods bought, sold & exchanged

CHAS. E. MARIS, Williamsburg, Ia., WRITES: "THE AMERICAN ARTISAN certainly has a large circulation from the inquiries I received."

ELEVATORS Improved Quick and Easy Rising Steam, Electric and Hand Power



Send for Circulars.
KIMBALL BROS. CO., 1031 Ninth St., Council Bluffs, Ia.
KIMBALL ELEVATOR CO., 139 Vincent St., Cleveland, O.

Stanley Rule and Level Co.

IMPROVED CARPENTERS' TOOLS Sold by All Hardware Dealers

NEW BRITAIN, CONN.

Measuring Tapes

Steel, Metallic, Linen, etc. Our Goods are Recognized as the Best. Tinners' Rules, Magic Pattern Rules, etc. Send for Catalogue and Mention The American Artisan.

Lufkin Rule Co.

SAGINAW, MICH.

"Yankee" Drills

MAGAZINE DRILLS IN No. 40 and 41

No. 40—AUTOMATIC DRILL, WITH RATCHET MOVEMENT

No. 41.—AUTOMATIC DRILL

No. 42—AUTOMATIC DRILL

No. 50—RECIPROCATING DRILL FOR WOOD OR METALS

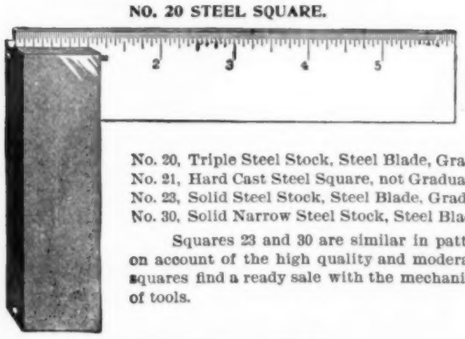
Sold by Leading Jobbers.

Send for "Yankee" Tool Book.

North Bros. Mfg. Co., Philadelphia, Pa.

DISSTON MACHINISTS' SQUARES.

NO. 20 STEEL SQUARE.



Tried Inside and Out.

—QUALITY— SUPERIOR

—FINISH— ACCURATE.

No. 20, Triple Steel Stock, Steel Blade, Graduated, 1-32-inch.
No. 21, Hard Cast Steel Square, not Graduated.
No. 23, Solid Steel Stock, Steel Blade, Graduated, 1-16-inch.
No. 30, Solid Narrow Steel Stock, Steel Blade, not Graduated.

Squares 23 and 30 are similar in pattern to No. 20, and on account of the high quality and moderate price these two squares find a ready sale with the mechanics using this class of tools.

SEE CATALOGUE FOR FULL LINE.

Henry Disston & Sons, INC.

KEYSTONE SAW, TOOL, STEEL AND FILE WORKS,
PHILADELPHIA, PENNA.

WILL C. HENNING, Berlin, Wis., Writes:

"Please discontinue my advertisement in the AMERICAN ARTISAN. It has done the work. I have had eighteen answers to same this week."

HERRICK'S

TOOL RACK.

Well Displayed Is Half Sold!

You will find it a paying investment to use Herrick's tool racks, tool brackets, sampling hooks, hammer and hatchet cases and screw cases. Address

F. A. HERRICK CO.

Jackson, Mich.

TACKS

TOWER M'F'G. CO.
ELM & FRONT STS.
CINCINNATI, O
MANUFACTURERS

The "Weber Junior" Pumper

Can also be used for other power purposes.

is all complete, ready to attach to pump. Equals 30 men pumping water. Uses but little gasoline. Is shipped crated completely erected, all connections made. Easy to start, any one can operate it. Every one guaranteed. Other sizes up to 50 H. P. Send for catalog. Weber Gas & Gasoline Engine Co., P. O. Box 1115s, Kansas City, Mo.

Compartment Sleepers
Standard Open Sleepers
Palace Parlor Cars
Table d'hote Diners
Luxurious Day Coaches

Are some of the many features of a trip over the

Big Four Route

CHICAGO to INDIANAPOLIS and CINCINNATI

Ask for Tickets via the "Big Four."

J. C. TUCKER, G. N. A., 234 Clark St., Chicago.

Every Prudent Planter Provides Himself

with a **"NEVER-BREAK"** GARDEN TROWEL in preference to any other. This trowel is made for strenuous service. Blade and socket are made of uniformly thick steel. No tin ferrules, nor anything flimsy about this tool. The handle will not cramp the user's hand; it is turned to comfortable size out of natural finished hardwood.

Catalogue of Garden Trowels and Seamless Drawn Steel Cooking Utensils free on request. You should have one.

THE AVERY STAMPING CO., :: Cleveland, Ohio.

Makers of "Never-Break" Goods.

If You Haven't Been Satisfied, Try Ours.

They are acknowledged by all who have used them to be the finest **Long Handled Pruning Shears** on the market. For hedge and tree pruning they have no equal.

Blades are forged from the finest tool steel and being made with a shear cut will do twice the work of any other.

Don't take substitutes—our name is stamped on the genuine. Send for the **Green Book** of Hardware Specialties for full particulars.

Smith & Hemenway Co., Corp. Ltd.
Mfgrs. of Cutlery and Hardware Specialties

Utica Drop Forge & Tool Co.
Mfgrs. of Nippers and Pliers.

296 Broadway, NEW YORK

American Family Scale.

BEST IN THE WORLD.

It is made of STEEL, TIN or BRASS Scoop Top.

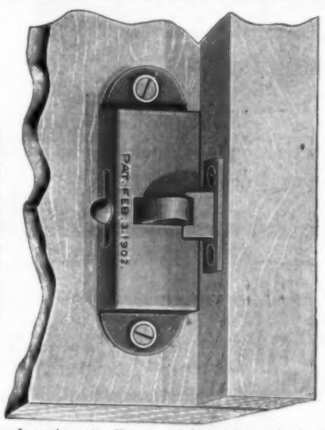
A most beautiful and attractive scale for all purposes. Beautifully enameled, ornamented and striped. Weighs 20 pounds by ounces. Occupies but little space. Is light and easily moved. It can be regulated by turning the brass screw on top. It is always ready and easily understood. It is a convenient scale to use, and has no weights that may be lost. You can look this one in the face to prove its accuracy without looking for weights. Every scale examined before leaving the factory and warranted correct.

MANUFACTURED BY

AMERICAN CUTLERY CO.
CHICAGO, ILLINOIS.

The Duplex Automatic Screen Door Catch.

Is a practical and useful article, and is also used on Cupboards and Hinge Windows or anything having doors of a similar design.



It works automatically, requiring no manipulation by hand or foot, as it automatically catches when the door closes, firmly holding it closed, until released by a slight pull or push, and can be dead locked when so desired. There is nothing in its construction to weaken or give out, and it can be applied by any person without difficulty. The DUPLEX CATCH gives unqualified satisfaction and is heartily endorsed by those who have used it, which insures a ready sale by the Hardware Dealer. Give it a trial.

Dull Nickel Solid Brass Copper Plate. Is both cheap and good. Easily sold, as we furnish dealers with working model. All first-class hardware jobbers handle it. Made by.

DUPLEX LATCH COMPANY,
Chamber of Commerce Bldg., CLEVELAND, OHIO.

Uncle Sam's Mail Box

Endorsed by Postmaster General.
Endorsed by Carriers.
Endorsed by Users.
Endorsed by Dealers.

Its special features enable the dealer to push its sales at large profits against any competition.

It sells at $2.00.

Write for circulars.

C. A. PECK HARDWARE CO.
203 HURON ST., BERLIN, WIS.

CRANES

ELECTRIC and HAND

HIGHEST GRADE FOR HARDEST WORK

SALES OF 950 MACHINES SHOWS ADMITTED SUPERIORITY.
CRANE BOOK F WHEN REQUESTED.

PAWLING & HARNISCHFEGER,
238 Oregon Street, MILWAUKEE, WIS.

Polishers and Platers Supplies

EVERYTHING FOR POLISHERS and PLATERS.

Tripoli Composition (all grades)
No. 5 English Crocus (the very best)
Silver Finish (in cans)
Turkish Emery
Emery Cake
Cotton Buffs
Spanish Felt Wheels
Canvas Wheels
Bull Neck Wheels

F. B. STEVENS (Maker of the Best)
DETROIT, MICH.

P. F. & A. T. Jones, Nashville, Tenn., write

"Your paper is to us in business what a prayer book is to the Churchman."

..THE HORIGAN WATER WORKS..

The following questions are frequently asked:

What are the Horigan Water Works?

It is a system of furnishing residences, suburban homes, and other buildings with a supply of pure water from your own well or cistern, by Air Compression.

Can you draw water from faucets the same as from City Water Works?

Yes.

Can I have a hot water boiler connected to range, so that I can have plenty of hot water, at all times?

You can.

If water was needed in a three-story building, could it be supplied?

Yes, by a slight increase in the pressure.

If a hydrant for lawn sprinkling was wanted, could it be used?

Yes, by simply putting a connection for same on the main supply pipe.

Can I supply the barn with water for stock, buggy washing, etc.?

Yes, by extending the supply pipe from tank to the barn, and using proper faucets.

Can this apparatus be used successfully in case of fire?

Yes, by simply attaching a hose to the hydrant, or to a faucet over the sink and starting the pump to maintain a high pressure.

Does it effect insurance rates?

It does in some cases as much as twenty-five per cent.

Is the system complicated?

No, the embodiment of simplicity

Where do you place the tank?

In the cellar or basement.

Does it make any difference as to how far from the house the well or cistern is located?

Practically none, with the exception of the additional cost for piping to the well, if distant.

When windmill p wer is applied, is there not danger of bursting tank and pipes?

No, this is overcome by the application of a Hydraulic Valve, which is so regulated that the water returns to the well or cistern, after the desired pressure has been obtained.

What pressure carried where this system is in use?

From forty to sixty pounds usually; one hundred pounds can be had if required.

How is the dirt or sediment that accumulates in the tank removed?

By removing the cap at the base of the tank, which is provided with handles, and can easily be removed.

Write for Circulars and prices.
Manufactured by

HORIGAN SUPPLY CO., ST. JOSEPH, MO.

B. G. I.

The Tomlinson Cleaner

Is the most satisfactory means of thoroughly cleaning a shot gun ever invented. It will absolutely remove rust spots and keep a gun in perfect condition. Will fit any standard rod and any gun. **The Tomlinson is cheap at $1.00** for it will last a lifetime with proper care. New wire sides furnished.

BRIDGEPORT GUN IMPLEMENT CO.,
Agency 313 Broadway, New York City, N. Y. BRIDGEPORT, CONN.

Cash Registers.

The **Standard Cash Register** wherever used by hardware dealers gives perfect and profitable satisfaction. Many thousands say so. Try one for profit. We have complete supply. Also Paper for all kinds of cash registers. Write for particulars.

J. N. BIDDLE & CO.
5479 Lexington Ave., CHICAGO.

THE RAPID STEAM COOKER

Is a marvel of economy in first cost, time required for cooking, and fuel consumed. It is durable, it is steam tight, it is convenient.

The Rapid Steam Cooker leaflet, telling all about it, on request. Agents wanted.

ROTARY STEAM COOKER CO.
101 Main Street, : BATTLE CREEK, MICH.

Only 1/3 of a Day

Between

CHICAGO

and

CINCINNATI

via the

MONON ROUTE
CHICAGO INDIANAPOLIS & LOUISVILLE RAILWAY

and C. H. & D. Ry.

Choice of 4 Superb Trains Daily.

DAY TRAINS equipped with Parlor and Dining Cars.

NIGHT TRAIN, with Palace, Sleeping and Compartment Cars.

CHAS. H. ROCKWELL, Traffic Manager.
FRANK J. REED Gen. Pass. Agt.

200 Custom House Place, Chicago.

IMPROVED NATURAL STONE GERM PROOF

WATER FILTERS

Prevent Zymotic Diseases by pushing sale of these goods in your locality.

EVERY FILTER IS GUARANTEED TO BE ABSOLUTELY GERM PROOF.

EVERY FILTER IS A PERFECT FILTER WHEN IT LEAVES OUR FACTORY.

Every shipment contains a handsome display card. Price lists and discounts are furnished upon application. Manufacturers of Sanitary Stoneware of every description. Pottery Established 1805.

FULPER POTTERY CO.
FLEMINGTON, N. J.

HURWOOD TOOLS
ARE INDESTRUCTIBLE.

WRITE FOR CATALOGUE

The Acme Manufacturing Co., Plantsville, Conn.

Sausage Stuffer, Lard and Fruit Press with Patented Corrugated Spout

8 Sizes and Styles

Meat Juice Extractor

No. 21 $2 50

Bone, Shell and Corn Mill

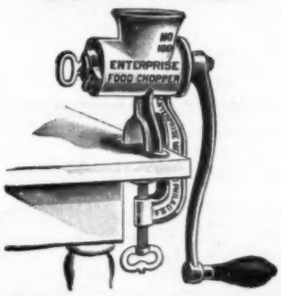
No. 750 $8.50

N. Y. Branch, 10 Warren Street

ENTERPRISE

Food Choppers

TINNED



No. 100 *chops 2 lbs. of Meat per minute* $1.50
No. 300 *chops 3 lbs. of Meat per minute* $2 25

Four Knives with each Machine

Fine | Medium | Coarse | Nut Butter Cutter

Order from your Jobber — Illustrated Catalogue Free

The Enterprise Mfg. Co. of Pa.

Philadelphia, Pa., U. S. A.

Rapid Grinding and Pulverizing Mills

40 Sizes & Styles for Hand, Steam & Electric Power

No. 3 $5.50

Raisin Seeder

No. 36 $1.00

Cold Handle Polishing IRONS

No. 82 $7.50 doz.

San Francisco Branch, 105 Front Street

BUY

Your goods well from a jobbing house that will give you attractive prices and prompt shipments. We are wholesalers of shelf hardware, house and bank trimmings, "Cutler's Easy" tools and cutlery.

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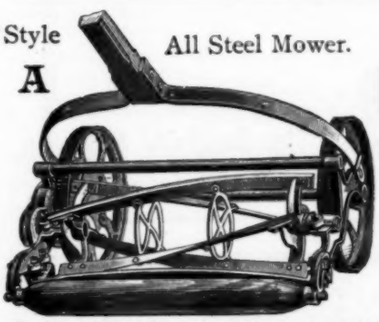

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MADE ONLY BY
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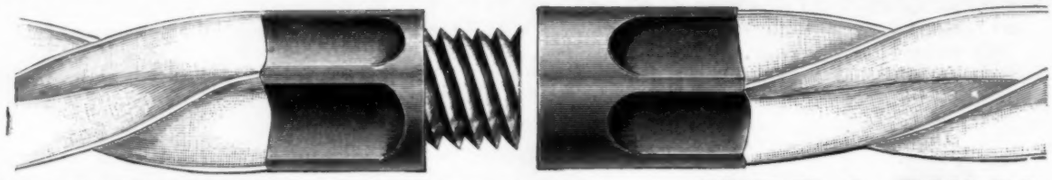

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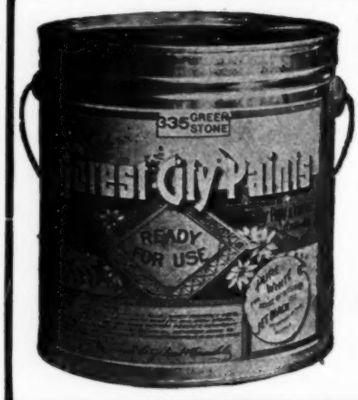

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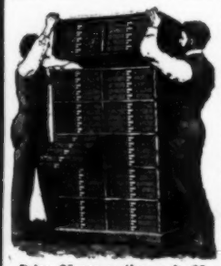

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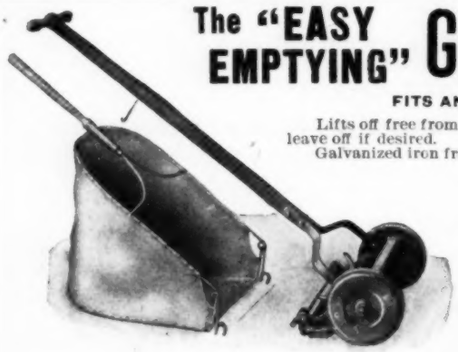

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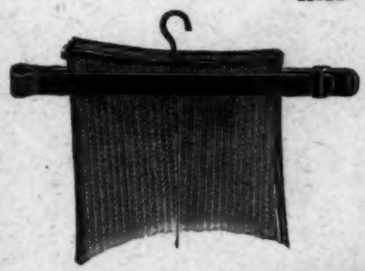

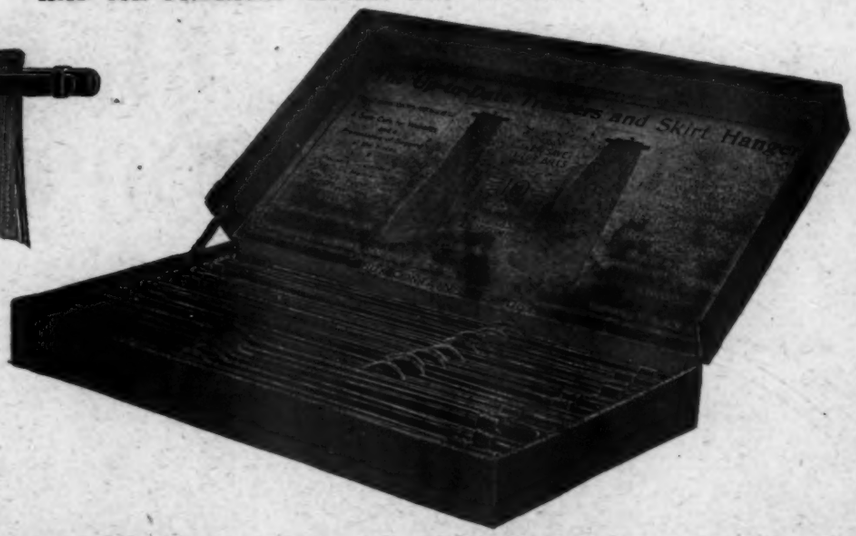

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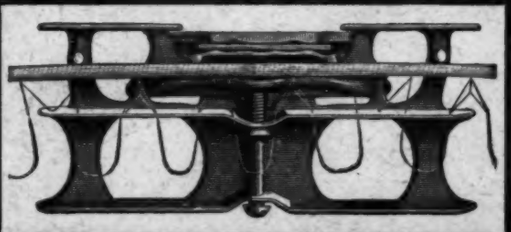

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